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OM protein - protein search, using sw model

Run on: October 29, 2004, 08:33:49 ; Search time 38 Seconds

(without alignments)
50.611 Million cell updates/sec

Title: US-09-822-873-1

Perfect score: 163

Sequence: 1 ALDAVCFRNVQNCCLPLIYIDFKRDLG 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 220852

Minimum DB seq length: 0

Maximum DB seq length: 29

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA.*
1: /cgn2_6/ptodata/1/iaa/5A COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PTUS COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	140	85.9	28	1	US-08-486-057B-11
2	140	85.9	28	2	US-08-789-588-11
3	130	79.8	29	1	US-08-486-057B-40.
4	130	79.8	29	2	US-08-789-588-40
5	121	74.2	21	4	US-08-188-197-2
6	98	60.1	21	4	US-08-188-197-3
7	94	57.7	20	1	US-08-486-057B-36
8	94	57.7	20	2	US-08-789-588-36
9	92	56.4	21	4	US-08-188-197-4
10	78	47.9	16	1	US-08-009-448-4
11	78	47.9	16	1	US-08-400-607-4
12	77	47.2	19	1	US-08-486-057B-10
13	77	47.2	19	2	US-08-789-588-10
14	75	46.0	17	4	US-08-294-061-1
15	75	46.0	17	4	US-08-188-197-5
16	75	46.0	21	6	5168051-16
17	68	41.7	21	4	US-08-188-197-1
18	68	41.7	29	6	5262319-8
19	61	37.4	10	1	US-08-486-057B-17
20	61	37.4	10	2	US-08-789-588-17
21	61	37.4	16	1	US-08-009-448-3
22	61	37.4	16	1	US-08-400-607-3
23	60	36.8	13	1	US-08-486-057B-25
24	60	36.8	13	2	US-08-789-588-25
25	57	35.0	9	1	US-08-486-057B-15
26	57	35.0	9	2	US-08-789-588-15
27	57	35.0	13	6	5262319-3

28 56 34.4 10 1 US-08-486-057B-14
29 56 34.4 10 2 US-08-789-588-14
30 54 33.1 25 6 5168051-14
31 50 30.7 9 1 US-08-486-057B-29
32 50 30.7 9 2 US-08-789-588-29
33 47 28.8 20 4 US-09-201-227A-30
34 47 28.8 20 4 US-09-084-303B-226
35 44 27.0 17 3 US-09-252-149B-6
36 40 24.5 10 1 US-08-486-057B-30
37 40 24.5 10 2 US-08-789-588-30
38 38 23.3 9 1 US-08-486-057B-32
39 38 23.3 9 2 US-08-789-588-32
40 38 23.3 11 3 US-08-866-585-17
41 38 23.3 11 4 US-09-428-082B-107
42 38 23.3 11 4 US-09-627-775-17
43 38 23.3 17 2 US-08-497-539-4
44 36 22.1 13 1 US-08-486-057B-23
45 36 22.1 13 2 US-08-789-588-23

ALIGNMENTS

RESULT 1
US-08-486-057B-11
; Sequence 11, Application US/08486057B
; Patent No. 5650494
; GENERAL INFORMATION:
; APPLICANT: Cerletti, Nico
; APPLICANT: McMaster, Gary K.
; APPLICANT: Cox, David
; APPLICANT: Schmitz, Albert
; APPLICANT: Meyhack, Bernd
; TITLE OF INVENTION: Process for Refolding Recombinantly
; TITLE OF INVENTION: Produced TGF-beta-like Proteins
; NUMBER OF SEQUENCES: 43
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Henry P. No. 5650494ak
; STREET: 520 White Plains Road, P.O. Box 2005
; CITY: Tarrytown
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10591-9005
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/486,057B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/201,703
; FILING DATE: 25-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/960,309
; FILING DATE: 13-OCT-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/621,502
; FILING DATE: 03-DEC-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 8927546.5
; FILING DATE: 06-DEC-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5650494ak, Henry P.
; REGISTRATION NUMBER: 33200
; REFERENCE/DOCKET NUMBER: 4-17861/+/Cont3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (908) 277-5110
; TELEFAX: (908) 277-4306
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:

Sequence 14, Appl
Sequence 14, Appl
Patent No. 5168051
Sequence 29, Appl
Sequence 29, Appl
Sequence 30, Appl
Sequence 226, Appl
Sequence 6, Appl
Sequence 30, Appl
Sequence 30, Appl
Sequence 32, Appl
Sequence 32, Appl
Sequence 17, Appl
Sequence 107, Appl
Sequence 17, Appl
Sequence 4, Appl
Sequence 23, Appl
Sequence 23, Appl

LENGTH: 28 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: peptide
US-08-486-057B-11

Query Match 85.9%; Score 140; DB 1; Length 28;
Best Local Similarity 92.9%; Pred. No. 2.1e-12;
Matches 26; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCLRPLYIDFKRDL 28
|||||
DB 1 ALDAAYCFRNVDNCCLRPLYIDFKRDL 28
|||||

RESULT 2

US-08-789-588-11
; Sequence 11, Application US/08789588
; Patent No. 5922846

GENERAL INFORMATION:

APPLICANT: Cerletti, Nico
APPLICANT: McMaster, Gary K.
APPLICANT: Cox, David
APPLICANT: Schmitz, Albert
APPLICANT: Meyhack, Bernd
TITLE OF INVENTION: Process for Refolding Recombinantly
TITLE OF INVENTION: Produced TGF-beta-like Proteins
NUMBER OF SEQUENCES: 43
CORRESPONDENCE ADDRESS:

ADDRESSEE: Henry P. No. 5922846ak
STREET: 520 White Plains Road, P.O. Box 2005
CITY: Tarrytown
STATE: New York
COUNTRY: U.S.A.
ZIP: 10591-9005
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/789,588
FILING DATE: 07-JUN-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/486,057
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/201,703
FILING DATE: 25-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/960,309
FILING DATE: 13-OCT-1992

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/621,502
FILING DATE: 03-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 8927546.5
FILING DATE: 06-DEC-1989
ATTORNEY/AGENT INFORMATION:
NAME: No. 5922846ak, Henry P.
REGISTRATION NUMBER: 33200
REFERENCE/DOCKET NUMBER: 4-17861/+ /Cont3

TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 277-5110
TELEFAX: (908) 277-4306
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 28 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: peptide

US-08-789-588-11

Query Match 85.9%; Score 140; DB 2; Length 28;
Best Local Similarity 92.9%; Pred. No. 2.1e-12;
Matches 26; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCLRPLYIDFKRDL 28
|||||
DB 1 ALDAAYCFRNVDNCCLRPLYIDFKRDL 28
|||||

RESULT 3

US-08-486-057B-40
; Sequence 40, Application US/08486057B
; Patent No. 5650494

GENERAL INFORMATION:

APPLICANT: Cerletti, Nico
APPLICANT: McMaster, Gary K.
APPLICANT: Cox, David
APPLICANT: Schmitz, Albert
APPLICANT: Meyhack, Bernd
TITLE OF INVENTION: Process for Refolding Recombinantly
TITLE OF INVENTION: Produced TGF-beta-like Proteins
NUMBER OF SEQUENCES: 43
CORRESPONDENCE ADDRESS:

ADDRESSEE: Henry P. No. 5650494ak
STREET: 520 White Plains Road, P.O. Box 2005
CITY: Tarrytown
STATE: New York
COUNTRY: U.S.A.
ZIP: 10591-9005
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,057B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/201,703
FILING DATE: 25-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/960,309
FILING DATE: 13-OCT-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/621,502
FILING DATE: 03-DEC-1990

PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 8927546.5
FILING DATE: 06-DEC-1989
ATTORNEY/AGENT INFORMATION:
NAME: No. 5650494ak, Henry P.
REGISTRATION NUMBER: 33200
REFERENCE/DOCKET NUMBER: 4-17861/+ /Cont3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 277-5110
TELEFAX: (908) 277-4306
INFORMATION FOR SEQ ID NO: 40:
SEQUENCE CHARACTERISTICS:
LENGTH: 29 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: peptide

US-08-486-057B-40

Query Match 79.8%; Score 130; DB 1; Length 29;
Best Local Similarity 89.7%; Pred. No. 5e-11;
Matches 26; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

Db 1 ALDAAAYCFRNVDNXXLRLPYIDFKRDLG 29

RESULT 4
US-08-789-588-40
; Sequence 40, Application US/08789588
; Patent No. 5922846
; GENERAL INFORMATION:
; APPLICANT: Cerletti, Nico
; APPLICANT: McMaster, Gary K.
; APPLICANT: Cox, David
; APPLICANT: Schmitz, Albert
; APPLICANT: Meyhack, Bernd
; TITLE OF INVENTION: Process for Refolding Recombinantly
; TITLE OF INVENTION: Produced TGF-beta-like Proteins
; NUMBER OF SEQUENCES: 43
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Henry P. No. 5922846ak
; STREET: 520 White Plains Road, P.O. Box 2005
; CITY: Tarrytown
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10591-9005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/789,588
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/486,057
; FILING DATE: 07-JUN-1995
; APPLICATION NUMBER: US 08/201,703
; FILING DATE: 25-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/960,309
; FILING DATE: 13-OCT-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/621,502
; FILING DATE: 03-DEC-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 892/546.5
; FILING DATE: 06-DEC-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5922846ak, Henry P.
; REGISTRATION NUMBER: 33200
; REFERENCE/DOCKET NUMBER: 4-17861/-/Cont3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (908) 277-5110
; TELEFAX: (908) 277-4306
; INFORMATION FOR SEQ ID NO: 40:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 29 amino acids
; TYPE: amino acid
; STRANDEDNESS: not relevant
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
US-08-789-588-40

Query Match 79.8%; Score 130; DB 2; Length 29;
Best Local Similarity 89.7%; Pred. No. 5e-11;
Matches 26; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 ALDAAAYCFRNVDNXXLRLPYIDFKRDLG 29

Db 1 ALDAAAYCFRNVDNXXLRLPYIDFKRDLG 29

RESULT 5

US-08-188-197-2
; Sequence 2, Application US/08188197
; Patent No. 6586394
; GENERAL INFORMATION:
; APPLICANT: Iwata, Kenneth K.
; APPLICANT: Stephenson, John R.
; APPLICANT: Gold, Leslie I.
; TITLE OF INVENTION: TISSUE-DERIVED TUMOR GROWTH INHIBITORS,
; TITLE OF INVENTION: METHODS OF PREPARATION AND USES THEREOF
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham LLP
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/188,197
; FILING DATE: 27-JAN-1994
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 22669J
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-278-0400
; TELEFAX: 212-391-0525
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-188-197-2

Query Match 74.2%; Score 121; DB 4; Length 21;
Best Local Similarity 100.0%; Pred. No. 5.9e-10;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAAYCFRNVDNXXLRLPY 21

Db 1 ALDAAAYCFRNVDNXXLRLPY 21

RESULT 6

US-08-188-197-3
; Sequence 3, Application US/08188197
; Patent No. 6586394
; GENERAL INFORMATION:
; APPLICANT: Iwata, Kenneth K.
; APPLICANT: Stephenson, John R.
; APPLICANT: Gold, Leslie I.
; TITLE OF INVENTION: TISSUE-DERIVED TUMOR GROWTH INHIBITORS,
; TITLE OF INVENTION: METHODS OF PREPARATION AND USES THEREOF
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham LLP
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/188,197
FILING DATE: 27-JAN-1994
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 22669J
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
TELEFAX: 212-391-0525
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-188-197-3

Query Match 60.1%; Score 98; DB 4; Length 21;
Best Local Similarity 71.4%; Pred. No. 7.5e-07;
Matches 15; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVQDNCCLRLPLY 21
DB 1 ALDTNYCFRNLNCCVRLPLY 21

RESULT 7

US-08-486-057B-36
Sequence 36, Application US/08486057B
Patent No. 5650494
GENERAL INFORMATION:
APPLICANT: Cerletti, Nico
APPLICANT: McMaster, Gary K.
APPLICANT: Cox, David
APPLICANT: Schmitz, Albert
APPLICANT: Meyhack, Bernd
TITLE OF INVENTION: Process for Refolding Recombinantly
Produced TGF-beta-like Proteins
NUMBER OF SEQUENCES: 43
CORRESPONDENCE ADDRESS:
ADDRESSEE: Henry P. No. 5650494ak
STREET: 520 White Plains Road, P.O. Box 2005
CITY: Tarrytown
STATE: New York
COUNTRY: U.S.A.
ZIP: 10591-9005
COMPUTER READABLE FORM:
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,057B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/201,703
FILING DATE: 25-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/960,309
FILING DATE: 13-OCT-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/621,502
FILING DATE: 03-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 8927546.5
FILING DATE: 06-DEC-1989
ATTORNEY/AGENT INFORMATION:
NAME: No. 5650494ak, Henry P.

REGISTRATION NUMBER: 33200
REFERENCE/DOCKET NUMBER: 4-17861/+/Cont3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 277-5110
TELEFAX: (908) 277-4306
INFORMATION FOR SEQ ID NO: 36:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: peptide
US-08-486-057B-36

Query Match 57.7%; Score 94; DB 1; Length 20;
Best Local Similarity 70.0%; Pred. No. 2.5e-06;
Matches 14; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 3 DAAYCFRNVQDNCCLRLPLYI 22
DB 1 DTNYCFRNLNCCVRLPLYI 20

RESULT 8

US-08-789-588-36
Sequence 36, Application US/08789588
Patent No. 5922846
GENERAL INFORMATION:
APPLICANT: Cerletti, Nico
APPLICANT: McMaster, Gary K.
APPLICANT: Cox, David
APPLICANT: Schmitz, Albert
APPLICANT: Meyhack, Bernd
TITLE OF INVENTION: Process for Refolding Recombinantly
Produced TGF-beta-like Proteins
NUMBER OF SEQUENCES: 43
CORRESPONDENCE ADDRESS:
ADDRESSEE: Henry P. No. 5922846ak
STREET: 520 White Plains Road, P.O. Box 2005
CITY: Tarrytown
STATE: New York
COUNTRY: U.S.A.
ZIP: 10591-9005
COMPUTER READABLE FORM:
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/789,588
FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/486,057
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 08/201,703
FILING DATE: 25-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/960,309
FILING DATE: 13-OCT-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/621,502
FILING DATE: 03-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 8927546.5
FILING DATE: 06-DEC-1989
ATTORNEY/AGENT INFORMATION:
NAME: No. 5922846ak, Henry P.
REGISTRATION NUMBER: 33200
REFERENCE/DOCKET NUMBER: 4-17861/+/Cont3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 277-5110
TELEFAX: (908) 277-4306

INFORMATION FOR SEQ ID NO: 36:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: peptide
US-08-789-588-36

Query Match 57.7%; Score 94; DB 2; Length 20;
Best Local Similarity 70.0%; Pred. No. 2.5e-06;
Matches 14; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Qy 3 DAAYCFRNVDNCCRLPLYI 22
Db 1 DTNYCFRNLENCVRLPLYI 20

RESULT 9
US-08-188-197-4
Sequence 4, Application US/08188197
Patent No. 6586394
GENERAL INFORMATION:
APPLICANT: Iwata, Kenneth K.
APPLICANT: Stephenson, John R.
APPLICANT: Gold, Leslie I.
TITLE OF INVENTION: TISSUE-DERIVED TUMOR GROWTH INHIBITORS,
TITLE OF INVENTION: METHODS OF PREPARATION AND USES THEREOF
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/188,197
FILING DATE: 27-JAN-1994

CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 22669J
TELEPHONE: 212-278-0400
TELEFAX: 212-391-0525

INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-188-197-4

Query Match 56.4%; Score 92; DB 4; Length 21;
Best Local Similarity 66.7%; Pred. No. 4.9e-06;
Matches 14; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 1 ALDAAAYCFRNVDNCCRLPLYI 21
Db 1 ALDNTYCFRNLENCVRLPLYI 21

RESULT 10
US-08-009-448-4
Sequence 4, Application US/08009448

Patent No. 5420243
GENERAL INFORMATION:
APPLICANT: OGAWA, YASUSHI
APPLICANT: SCHMIDT, DAVID
TITLE OF INVENTION: BIOLOGICALLY ACTIVE TGF-BETA1 AND
TITLE OF INVENTION: TGF-BETA2 PEPTIDES
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
STREET: 755 Page Mill Road
CITY: Palo Alto
STATE: California
COUNTRY: USA
ZIP: 94304-1018

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/009,448
FILING DATE: 19930126

CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: LEHNHARDT, SUSAN K.
REGISTRATION NUMBER: 33,943
REFERENCE/DOCKET NUMBER: 22095-20007.00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 813-5600
TELEFAX: (415) 494-0792
TELEX: 706141

INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 16 amino acids
TYPE: AMINO ACID
STRANDEDNESS: single
TOPOLOGY: linear
US-08-009-448-4

Query Match 47.9%; Score 78; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 0.00029;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 CLRPLYIDFKRLDG 29
Db 1 CLRPLYIDFKRLDG 14

RESULT 11
US-08-400-607-4
Sequence 4, Application US/08400607
Patent No. 5658883
GENERAL INFORMATION:
APPLICANT: OGAWA, YASUSHI
APPLICANT: SCHMIDT, DAVID
TITLE OF INVENTION: BIOLOGICALLY ACTIVE TGF-B1 AND TGF-B2
TITLE OF INVENTION: PEPTIDES
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
STREET: 755 Page Mill Road
CITY: Palo Alto
STATE: California
COUNTRY: USA
ZIP: 94304-1018

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/400,607
FILING DATE: 08-MAR-1995

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; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: PARK, FREDDIE K.
; REGISTRATION NUMBER: 35,636
; REFERENCE/DOCKET NUMBER: 22095-20007.10
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 813-5600
; TELEFAX: (415) 494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-400-607-4
;
; Query Match 47.9%; Score 78; DB 1; Length 16;
; Best Local Similarity 100.0%; Pred. No. 0.00029;
; Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; QY 16 CLRPLVIDFKRDIG 29
; DB 1 CLRPLVIDFKRDIG 14
;
; RESULT 12
; US-08-486-057B-10
; Sequence 10, Application US/08486057B
; Patent No. 5650494
; GENERAL INFORMATION:
; APPLICANT: Cerletti, Nico
; APPLICANT: McMaster, Gary K.
; APPLICANT: Cox, David
; APPLICANT: Schmitz, Albert
; APPLICANT: Meyhack, Bernd
; TITLE OF INVENTION: Process for Refolding Recombinantly
; TITLE OF INVENTION: Produced TGF-beta-like Proteins
; NUMBER OF SEQUENCES: 43
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Henry P. No. 5650494ak
; STREET: 520 White Plains Road, P.O. Box 2005
; CITY: Tarrytown
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10591-9005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/486,057B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/201,703
; FILING DATE: 25-FEB-1994
; PRIOR APPLICATION NUMBER: US 07/960,309
; APPLICATION NUMBER: US 07/621,502
; FILING DATE: 13-OCT-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 8927546.5
; FILING DATE: 06-DEC-1989
; PRIOR APPLICATION NUMBER: 4-17861/+/Cont3
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5650494ak, Henry P.
; REGISTRATION NUMBER: 33200
; REFERENCE/DOCKET NUMBER: 4-17861/+/Cont3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (908) 277-5110
; TELEFAX: (908) 277-4306
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 amino acids
; TYPE: amino acid
;
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: PARK, FREDDIE K.
; REGISTRATION NUMBER: 35,636
; REFERENCE/DOCKET NUMBER: 22095-20007.10
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 813-5600
; TELEFAX: (415) 494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 4:
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-400-607-4
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; Query Match 47.2%; Score 77; DB 1; Length 19;
; Best Local Similarity 84.2%; Pred. No. 0.00047;
; Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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; QY 1 ALDAAYCFRNVDNCCLRP 19
; DB 1 ALDAAYCFRNVDNXXLRP 19
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; RESULT 13
; US-08-789-588-10
; Sequence 10, Application US/08789588
; Patent No. 5922846
; GENERAL INFORMATION:
; APPLICANT: Cerletti, Nico
; APPLICANT: McMaster, Gary K.
; APPLICANT: Cox, David
; APPLICANT: Schmitz, Albert
; APPLICANT: Meyhack, Bernd
; TITLE OF INVENTION: Process for Refolding Recombinantly
; TITLE OF INVENTION: Produced TGF-beta-like Proteins
; NUMBER OF SEQUENCES: 43
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Henry P. No. 5922846ak
; STREET: 520 White Plains Road, P.O. Box 2005
; CITY: Tarrytown
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10591-9005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/789,588
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/486,057
; FILING DATE: 07-JUN-1995
; APPLICATION NUMBER: US 08/201,703
; FILING DATE: 25-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/960,309
; FILING DATE: 13-OCT-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/621,502
; FILING DATE: 03-DEC-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 8927546.5
; FILING DATE: 06-DEC-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5922846ak, Henry P.
; REGISTRATION NUMBER: 33200
; REFERENCE/DOCKET NUMBER: 4-17861/+/Cont3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (908) 277-5110
; TELEFAX: (908) 277-4306
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 amino acids
; TYPE: amino acid
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STRANDEDNESS: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: Peptide
US-08-789-588-10

Query Match 47.2%; Score 77; DB 2; Length 19;
Best Local Similarity 84.2%; Pred. No. 0.00047;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNVDNCCLRP 19
Db 1 ALDAAAYCFRNVDNXXLRP 19

RESULT 14
US-08-294-061-1
Sequence 1, Application US/08294061
Patent No. 6559123
GENERAL INFORMATION:
APPLICANT: Iwata, Kenneth K.
APPLICANT: Stephenson, John R.
APPLICANT: Gold, Leslie I.
TITLE OF INVENTION: Tissue-Derived Tumor Growth Inhibitors
TITLE OF INVENTION: Inhibitors
TITLE OF INVENTION: Methods of Preparation and Uses
TITLE OF INVENTION: Thereof
NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/294,061
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: White Esq., John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 22669-K/JPW/NPL
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-977-9550
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: N
ANTI-SENSE: N
FRAGMENT TYPE: N-terminal
FEATURE:
NAME/KEY: Peptide
LOCATION: 1..17
OTHER INFORMATION:
US-08-294-061-1

Query Match 46.0%; Score 75; DB 4; Length 17;
Best Local Similarity 64.7%; Pred. No. 0.00078;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNVDNCCL 17
Db 1 ALDNTNYCFRNLENCVV 17

RESULT 15
US-08-188-197-5
Sequence 5, Application US/08188197
Patent No. 6586394
GENERAL INFORMATION:
APPLICANT: Iwata, Kenneth K.
APPLICANT: Stephenson, John R.
APPLICANT: Gold, Leslie I.
TITLE OF INVENTION: TISSUE-DERIVED TUMOR GROWTH INHIBITORS.
TITLE OF INVENTION: METHODS OF PREPARATION AND USES THEREOF
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/188,197
FILING DATE: 27-JAN-1994
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 22669J
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
TELEFAX: 212-391-0525
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-188-197-5

Query Match 46.0%; Score 75; DB 4; Length 17;
Best Local Similarity 64.7%; Pred. No. 0.00078;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNVDNCCL 17
Db 1 ALDNTNYCFRNLENCVV 17

Search completed: October 29, 2004, 08:42:05
Job time : 38 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 29, 2004, 08:22:38 ; Search time 190 Seconds
(without alignments)

87.820 Million cell updates/sec

Title: US-09-822-873-1

Perfect score: 163

Sequence: 1 ALDAAVCFERNQDNCCLREPLYIDFKRDLG 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Uniprot 02.*

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	163	100.0	112	1	TGF2_BOVIN
2	163	100.0	224	2	Q8CDZ9
3	163	100.0	255	2	Q921T1
4	163	100.0	399	2	Q9EB7
5	163	100.0	412	1	TGF2_CHICK
6	163	100.0	414	1	TGF2_CERAE
7	163	100.0	414	1	TGF2_HUMAN
8	163	100.0	414	1	TGF2_MOUSE
9	163	100.0	414	2	Q91V5
10	163	100.0	435	1	TGF2_PIG
11	163	100.0	442	1	TGF2_RAT
12	163	100.0	442	2	Q6T7C3
13	163	100.0	442	2	AAR06973
14	160	98.2	413	1	TGF2_XENLA
15	148	90.8	361	2	Q98854
16	133	81.6	362	2	Q99K17
17	133	81.6	409	1	TGF3_PIG
18	133	81.6	410	1	TGF3_MOUSE
19	133	81.6	412	1	TGF3_HUMAN
20	133	81.6	412	1	TGF3_RAT
21	133	81.6	412	2	Q91VU7
22	124	76.1	411	2	Q7SZV4
23	119	73.0	91	2	Q9MYZ1
24	118	72.4	410	2	Q7SZV3
25	118	72.4	412	1	TGF3_CHICK
26	113	69.3	179	2	Q90VF2
27	111	68.1	112	2	Q02730
28	111	68.1	124	2	Q95N80
29	111	68.1	130	2	Q08714
30	111	68.1	315	1	TGF1_BOVIN
31	111	68.1	368	2	Q9R4D9

32	111	68.1	390	1	TGF1_CANFA
33	111	68.1	390	1	TGF1_CERAE
34	111	68.1	390	1	TGF1_HORSE
35	111	68.1	390	1	TGF1_HUMAN
36	111	68.1	390	1	TGF1_MOUSE
37	111	68.1	390	1	TGF1_PIG
38	111	68.1	390	1	TGF1_RAT
39	111	68.1	390	1	TGF1_SHEEP
40	111	68.1	390	2	AAP35909
41	111	68.1	390	2	AAS55640
42	107	65.6	390	1	TGF1_CAVPO
43	104	63.8	86	2	Q28241
44	103	63.2	390	2	Q9TUM8
45	97	59.5	127	2	Q9TV08

P54831 canis famil
P09533 cercopithe
O19011 equus cabal
P01137 homo sapien
P04202 mus musculu
P07200 sus scrofa
P17246 rattus norv
P50414 ovis aries
Aap35909 homo sapi
Aas55640 rattus no
O921v6 cervia porce
Q28241 carvus elap
Q9tum8 equus cabal
Q9tv08 canis famil

ALIGNMENTS

RESULT 1
TGF2_BOVIN
ID TGF2_BOVIN STANDARD; PRT; 112 AA.
AC P21214;
DT 01-MAY-1991 (Rel. 18, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Transforming growth factor beta 2 (TGF-beta 2) (Milk growth factor) (MGF).
DE (MGF).
GN Name=TGFβ2;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE.
RC TISSUE=Milk;
RX MEDLINE=92189724; PubMed=1799413;
RA Jin Y., Cox D.A., Knecht R., Raschdorf F., Cerletti N.,
RT "Separation, purification, and sequence identification of TGF-beta 1 and TGF-beta 2 from bovine milk.";
RL J. Protein Chem. 10:565-575 (1991).
RN [2]
RP SEQUENCE OF 1-30.
RC TISSUE=Bone;
RX MEDLINE=87137406; PubMed=3469199;
RA Seyedin S.M., Segarini P.R., Rosen D.M., Thompson A.Y., Bentz H.,
RT "Cartilage-inducing factor-B is a unique protein structurally and functionally related to transforming growth factor-beta.";
RL J. Biol. Chem. 262:1946-1949 (1987).
RN [3]
RP SEQUENCE OF 1-19.
RC TISSUE=Milk;
RX MEDLINE=91224126; PubMed=2026157;
RA Cox D.A., David A., Buerk R.R.;
RT "Isolation and characterization of milk growth factor, a transforming-growth-factor-beta 2-related polypeptide, from bovine milk.";
RL Eur. J. Biochem. 197:353-358 (1991).
RN [4]
RP SUBUNITS.
RC TISSUE=Bone;
RX MEDLINE=92129307; PubMed=1733936;
RA Ogawa Y., Schmidt D.K., Dasch J.R., Chang R.J., Glaser C.B.;
RT "Purification and characterization of transforming growth factor-beta 2.3 and -beta 1.2 heterodimers from bovine bone.";
RL J. Biol. Chem. 267:2325-2328 (1992).
CC -!- FUNCTION: TGF-beta 2 has suppressive effects on interleukin-2 dependent T-cell growth.
CC -!- SUBUNIT: Homodimer; disulfide-linked. Heterodimers of TGF-beta 1/2 and of TGF-beta 2/3 have been found in bone.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the TGF-beta family.

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DR PIR: A61439; A61439.
DR HGSP: P08112; 2TGI.
DR InterPro: IPR002400; GF cysknot.
DR InterPro: IPR001839; TGFb.
DR Pfam: PF00019; TGF beta; 1.
DR PRINTS: PR00438; GFCYSKNOT.
DR ProDom: PD000357; TGFb; 1.
DR SMART: SM00204; TGFb; 1.
DR PROSITE: PS00250; TGF BETA 1; 1.
KW Direct protein sequencing; Growth factor; Milk; Mitogen.
FT DISULFID 7 16
FT DISULFID 15 78
FT DISULFID 44 109
FT DISULFID 48 111
FT DISULFID 77 77
SQ SEQUENCE 112 AA; 12719 MW; 5142C7432C4EB1C CRC64;

Query Match 100.0%; Score 163; DB 1; Length 112;
Best Local Similarity 100.0%; Pred. No. 4.2e-16;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 ALDAAYCFRNVQDNCCLRPPLYIDFKRDLG 29
Db 1 ALDAAYCFRNVQDNCCLRPPLYIDFKRDLG 29

RESULT 2
Q8CDZ9 PRELIMINARY; PRT; 224 AA.
AC Q8CDZ9
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Mus musculus 0 day neonate head cDNA, RIKEN full-length enriched
DE library, clone:483241a13 product:transforming growth factor, beta 2,
DE full insert sequence. (Fragment).
GN Name=Tgfb2;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RN SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Head;
RX MEDLINE=9279253; PubMed=10349636;
RA Carninci P., Hayashizaki Y.;
RT "High-efficiency full-length cDNA cloning.";
RL Meth. Enzymol. 303:19-44(1999).
RN [2]
RN SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Head;
RX MEDLINE=21085660; PubMed=11217851;
RA RIKEN FANTOM Consortium;
RT "Functional annotation of a full-length mouse cDNA collection.";
RN [3]
RN SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Head;
RA The FANTOM Consortium.
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573 (2002).
RN [4]
RN SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Head;
RX MEDLINE=20493374; PubMed=11042159;
RA Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M.,
RA Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
RT "Normalization and subtraction of cap-trapper-selected cDNAs to
RT prepare full-length cDNA libraries for rapid discovery of new genes.";
RL Genome Res. 10:1617-1630(2000).
RN [5]

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RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Head;
RX MEDLINE=20530913; PubMed=11076861;
RA Shibata K., Itoh M., Aizawa K., Nagao S., Sasaki N., Carninci P.,
RA Konno H., Akiyama J., Nishi K., Kitsuai T., Tashiro H., Itoh M.,
RA Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A.,
RA Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,
RA Fujiwaki S., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki M.,
RA Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsura S., Kawai J.,
RA Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.;
RT "RIKEN integrated sequence analysis (RISA) system-384-format
RT sequencing pipeline with 384 multicapillary sequencer.";
RL Genome Res. 10:1757-1771(2000).
RN [6]
RN SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Head;
RA Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,
RA Fukuda S., Furuno M., Hanagaki T., Hara A., Hashizume W.,
RA Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Hirozane T.,
RA Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
RA Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya S.,
RA Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M.,
RA Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Okazaki Y.,
RA Saito R., Saitoh H., Sakai C., Sakai X., Sakazume N., Sano H.,
RA Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M.,
RA Tagawa A., Takahashi F., Takaku-Akahira S., Takeda Y., Tanaka T.,
RA Tonaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.;
RL Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
CC -!- SIMILARITY: Belongs to the TGF-beta family.
DR EMBL: AK029306; BAC26384.1; -.
DR MGD: MGI:98726; Tgfb2.
DR GO: GO:0030198; P:extracellular matrix organization and bioge. .; IMP.
DR InterPro: IPR001839; TGFb.
DR InterPro: IPR003940; TGFb2.
DR InterPro: IPR001111; TGFb N.
DR Pfam: PF00688; TGFb propeptide; 1.
DR Pfam: PF00019; TGF beta; 1.
DR PRINTS: PR01425; TGFb2.
DR ProDom: PD000357; TGFb; 1.
DR SMART: SM00204; TGFb; 1.
DR PROSITE: PS00250; TGF_BETA_1; 1.
KW Growth factor.
FT NON TER 1
SQ SEQUENCE 224 AA; 25538 MW; 9264D6C878C8D2BC CRC64;

Query Match 100.0%; Score 163; DB 2; Length 224;
Best Local Similarity 100.0%; Pred. No. 8.3e-16;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 ALDAAYCFRNVQDNCCLRPPLYIDFKRDLG 29
Db 113 ALDAAYCFRNVQDNCCLRPPLYIDFKRDLG 141

RESULT 3
Q921T1 PRELIMINARY; PRT; 255 AA.
ID Q921T1
AC Q921T1
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Tgfb2 protein.
GN Name=Tgfb2;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RN SEQUENCE FROM N.A.
RC STRAIN=FVB/N;
RC TISSUE=Mammary tumor. Metallothionien-TGF alpha model. 10 month old
RC virgin mouse. Taken by biopsy.;
RX MEDLINE=22388257; PubMed=12477932;

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RA	Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.	RL	Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
RA	-!- SIMILARITY: Belongs to the TGF-beta family.	CC	-!- SIMILARITY: Belongs to the TGF-beta family.
RA	EMBL; AY007214; AAG02247.1; -	CC	EMBL; AY007214; AAG02247.1; -
RA	HSBP; P08112; 2TC1.	DR	HSBP; P08112; 2TC1.
RA	GO; GO:0008083; F: growth factor activity; IEA.	DR	GO; GO:0008083; F: growth factor activity; IEA.
RA	GO; GO:0005160; F: transforming growth factor beta receptor bi. . . ; IEA.	DR	GO; GO:0005160; F: transforming growth factor beta receptor bi. . . ; IEA.
RA	GO; GO:0016049; P: cell growth; IEA.	DR	GO; GO:0016049; P: cell growth; IEA.
RA	InterPro; IPR001839; TGFb.	DR	InterPro; IPR001839; TGFb.
RA	InterPro; IPR003940; TGFb2.	DR	InterPro; IPR003940; TGFb2.
RA	InterPro; IPR001111; TGFb N.	DR	InterPro; IPR001111; TGFb N.
RA	InterPro; IPR003911; TGF TGFb.	DR	InterPro; IPR003911; TGF TGFb.
RA	Pfam; PF00688; TGFb propeptide; 1.	DR	Pfam; PF00688; TGFb propeptide; 1.
RA	Pfam; PF00019; TGF beta; 1.	DR	Pfam; PF00019; TGF beta; 1.
RA	PRINTS; PR01423; TGFbeta.	DR	PRINTS; PR01423; TGFbeta.
RA	PRINTS; PR01425; TGFbeta2.	DR	PRINTS; PR01425; TGFbeta2.
RA	ProDom; PD000357; TGFb; 1.	DR	ProDom; PD000357; TGFb; 1.
RA	SMART; SM00204; TGFb; 1.	DR	SMART; SM00204; TGFb; 1.
RA	PROSITE; PS00250; TGF_BETA_1; 1.	DR	PROSITE; PS00250; TGF_BETA_1; 1.
RA	Growth factor.	KW	Growth factor.
FT	NON_TER 1	FT	NON_TER 1
FT	SEQUENCE 399 AA; 46078 MW; A6FP8E5EAFD5148 CRC64;	FT	SEQUENCE 399 AA; 46078 MW; A6FP8E5EAFD5148 CRC64;
CC	Query Match 100.0%; Score 163; DB 2; Length 399;	CC	Query Match 100.0%; Score 163; DB 2; Length 399;
CC	Best Local Similarity 100.0%; Pred. No. 1.4e-15;	CC	Best Local Similarity 100.0%; Pred. No. 1.4e-15;
CC	Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	CC	Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1 ALDAAFCFNVQDNCCLRPYIDFKRDLG 29	QY	1 ALDAAFCFNVQDNCCLRPYIDFKRDLG 29
DB	296 ALDAAFCFNVQDNCCLRPYIDFKRDLG 324	DB	296 ALDAAFCFNVQDNCCLRPYIDFKRDLG 324
RESULT 5		RESULT 5	
ID	TGF2 CHICK	ID	TGF2 CHICK
AC	P30371; STANDARD; PRT; 412 AA.	AC	P30371; STANDARD; PRT; 412 AA.
DT	01-APR-1993 (Rel. 25, Created)	DT	01-APR-1993 (Rel. 25, Created)
DT	01-APR-1993 (Rel. 25, Last sequence update)	DT	01-APR-1993 (Rel. 25, Last sequence update)
DE	05-JUL-2004 (Rel. 44, Last annotation update)	DE	05-JUL-2004 (Rel. 44, Last annotation update)
DE	Transforming growth factor beta 2 precursor (TGF-beta 2).	DE	Transforming growth factor beta 2 precursor (TGF-beta 2).
GN	Name=TGFb2;	GN	Name=TGFb2;
OS	Gallus gallus (Chicken).	OS	Gallus gallus (Chicken).
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC	Archosauria; Aves; Neognathae; Galliformes; Phasianinae;	OC	Archosauria; Aves; Neognathae; Galliformes; Phasianinae;
OC	Gallus.	OC	Gallus.
OX	NCBI_TaxID=9031;	OX	NCBI_TaxID=9031;
RN	[1]	RN	[1]
RP	SEQUENCE FROM N.A.	RP	SEQUENCE FROM N.A.
RC	STRAIN=White leghorn; TISSUE=Blood;	RC	STRAIN=White leghorn; TISSUE=Blood;
RX	MEDLINE=92075163; PubMed=1683775;	RX	MEDLINE=92075163; PubMed=1683775;
RT	Burt D.W., Paton I.R.;	RT	Burt D.W., Paton I.R.;
RA	"Molecular cloning and primary structure of the chicken transforming growth factor-beta 2 gene."	RA	"Molecular cloning and primary structure of the chicken transforming growth factor-beta 2 gene."
RL	DNA Cell Biol. 10:723-734(1991).	RL	DNA Cell Biol. 10:723-734(1991).
CC	-!- FUNCTION: TGF-beta 2 has suppressive effects on interleukin-2 dependent T-cell growth.	CC	-!- FUNCTION: TGF-beta 2 has suppressive effects on interleukin-2 dependent T-cell growth.
CC	-!- SUBUNIT: Homodimer; disulfide-linked.	CC	-!- SUBUNIT: Homodimer; disulfide-linked.
CC	-!- SUBCELLULAR LOCATION: Secreted.	CC	-!- SUBCELLULAR LOCATION: Secreted.
CC	-!- SIMILARITY: Belongs to the TGF-beta family.	CC	-!- SIMILARITY: Belongs to the TGF-beta family.
CC		CC	
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CC		CC	
DR	EMBL; X58071; CAA41101.1; -	DR	EMBL; X58071; CAA41101.1; -
DR	EMBL; X59082; CAA41101.1; JOINED.	DR	EMBL; X59082; CAA41101.1; JOINED.
DR	EMBL; X59081; CAA41101.1; JOINED.	DR	EMBL; X59081; CAA41101.1; JOINED.
DR	EMBL; X59080; CAA41101.1; JOINED.	DR	EMBL; X59080; CAA41101.1; JOINED.
DR	PIR; A39489; A39489.	DR	PIR; A39489; A39489.

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DR HSP; P08112; 2TGI.
DR InterPro; IPR002400; GF cystknot.
DR InterPro; IPR001839; TGFb.
DR InterPro; IPR001111; TGFb.N.
DR InterPro; IPR000911; TGF.TGFB.
DR Pfam; PF00688; TGFb.propeptide; 1.
DR Pfam; PF00019; TGF.beta; 1.
DR PRINTS; PR00438; GFCYSKNOT.
DR PRINTS; PR01423; TGFb.BETA.
DR ProDom; PD000357; TGFb; 1.
DR SMART; SM00204; TGFb; 1.
DR PROSITE; PS00250; TGF.BETA.1; 1.
KW Glycoprotein; Growth factor; Mitogen; signal.
FT SIGNAL 1 20 Potential.
FT PROPEP 21 300 Transforming growth factor beta 2.
FT CHAIN 301 412 By similarity.
FT DISULFID 307 316 By similarity.
FT DISULFID 315 378 By similarity.
FT DISULFID 344 409 By similarity.
FT DISULFID 348 411 By similarity.
FT DISULFID 377 377 Interchain (By similarity).
FT CARBOHYD 72 72 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 139 139 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 240 240 N-linked (GlcNAc...) (Potential).
SQ SEQUENCE 412 AA; 47606 MW; 93E759BF1BD958DC CRC64;

Query Match 100.0%; Score 163; DB 1; Length 412;
Best Local Similarity 100.0%; Pred. No. 1.5e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVQNCCLRLPLVDFKRDLG 29
DB 301 ALDAAYCFRNVQNCCLRLPLVDFKRDLG 329

RESULT 6
ID _TGF2_CERAE STANDARD; PRT; 414 AA.
AC P61811; P08112; Q15579; Q15581;
DT 01-AUG-1988 (Rel. 08, Created)
DT 01-AUG-1988 (Rel. 08, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Transforming growth factor beta 2 precursor (TGF-beta 2)
DE (Glioblastoma-derived T-cell suppressor factor) (G-TSF) (BSC-1 cell
DE growth inhibitor) (Polyergin).
GN Names=TGFb2;
OS Cercopithecus aethiops (Green monkey) (Grivet).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Primates; Catarrhini; Cercopithecidae;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9534;
RN [1]
RN SEQUENCE FROM N.A.
RX MEDLINE=88124824; PubMed=3277172;
RA Hanks S., Armour R., Baldwin J.H., Maldonado F., Spiess J.,
RA Holley R.W.;
RT "Amino acid sequence of the BSC-1 cell growth inhibitor (polyergin)
RT deduced from the nucleotide sequence of the cDNA."
RL Proc. Natl. Acad. Sci. U.S.A. 85:79-82(1988).
CC -!- FUNCTION: TGF-beta 2 has suppressive effects on interleukin-2
CC dependent T-cell growth.
CC -!- SUBUNIT: Homodimer; disulfide-linked.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the TGF-beta family.
CC
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CC

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RN [3] SEQUENCE FROM N.A. (ISOFORM A), AND VARIANTS HIS-91 AND LEU-207.
 RP MEDLINE=89090808; PubMed=2850146;
 RX Webb N.R., Madisen L., Rose T.M., Purchio A.F.;
 RA "Structural and sequence analysis of TGF-beta 2 cDNA clones predicts
 RT two different precursor proteins produced by alternative mRNA
 RL splicing.";
 RN DNA 7:493-497(1988).
 [4]
 RP SEQUENCE FROM N.A. (ISOFORM A), AND VARIANTS HIS-91 AND LEU-207.
 RA Rieder M.J., Livingston R.J., Daniels M.R., Chung M.-W.,
 RA Miyamoto K.E., Nguyen C.P., Nguyen D.A., Poel C.L., Robertson P.D.,
 RA Schackwitz W.S., Sherwood J.K., Witlak L.A., Nickerson D.A.;
 RT "NIHNS-SNPs, environmental genome project, NIHNS ES15478, Department
 of Genome Sciences, Seattle, WA (URL: <http://egp.gs.washington.edu>).";
 RL Submitted (OCT-2003) to the EMBL/GenBank/DBJ databases.
 [5]
 RP SEQUENCE OF 1-115 FROM N.A.
 RC TISSUE=Lung;
 RX MEDLINE=921110032; PubMed=1764261;
 RA Noma T., Glick A.B., Geiser A.G., O'Reilly M.A., Miller J.,
 RA Roberts A.B., Sporn M.B.;
 RT "Molecular cloning and structure of the human transforming growth
 factor-beta 2 gene promoter";
 RL Growth Factors 4:247-255(1991).
 [6]
 RP SEQUENCE OF 303-414.
 RX MEDLINE=87308213; PubMed=3476488;
 RA Marquardt H., Lioubin M.N., Ikeda T.;
 RT "Complete amino acid sequence of human transforming growth factor type
 beta 2";
 RL J. Biol. Chem. 262:12127-12131(1987).
 [7]
 RP X-RAY CRYSTALLOGRAPHY (2.1 ANGSTROMS).
 RX MEDLINE=92335881; PubMed=1631557;
 RA Daopin S., Piez K.A., Ogawa Y., Davies D.R.;
 RT "Crystal structure of transforming growth factor-beta 2: an unusual
 fold for the superfamily.";
 RL Science 257:369-373(1992).
 [8]
 RP X-RAY CRYSTALLOGRAPHY (2.2 ANGSTROMS).
 RX MEDLINE=92350287; PubMed=1641027;
 RA Schlunegger M.P., Gruetter M.G.;
 RT "An unusual feature revealed by the crystal structure at 2.2-A
 resolution of human transforming growth factor-beta 2";
 RL Nature 358:430-434(1992).
 [9]
 RP VARIANT HIS-91.
 RX MEDLINE=21419167; PubMed=11528528; DOI=10.1038/sj/gene/6363780;
 RA Alansari A., Hajeer A.H., Bayat A., Eyre S., Carthy D., Ollier W.E.;
 RT "Two novel polymorphisms in the human transforming growth factor beta
 2 gene";
 RL Genes Immun. 2:295-296(2001).
 CC -!- FUNCTION: TGF-beta 2 has suppressive effects on interleukin-2
 dependent T-cell growth.
 CC -!- SUBUNIT: Homodimer; disulfide-linked.
 CC -!- SUBCELLULAR LOCATION: Secreted.
 CC -!- ALTERNATIVE PRODUCTS:
 CC Event=Alternative splicing; Named isoforms=2;
 CC Name=A;
 CC IsoId=P61812-1, P08112-1; Sequence=Displayed;
 CC Name=B;
 CC IsoId=P61812-2, P08112-2; Sequence=VSP_006417;
 CC -!- SIMILARITY: Belongs to the TGF-beta family.
 CC
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 CC -----

DR EMBL; Y00083; CAA68279.1; --
 DR EMBL; M19154; AAA50404.1; --
 DR EMBL; M19154; AAA50405.1; ALT_SEQ.
 DR EMBL; AY438979; NAR05442.1; --
 DR EMBL; M87843; AAG61162.1; --
 DR PIR; A29478; B31249.
 DR PIR; S06216; A31249.
 DR PDB; 1TFG; X-ray; --
 DR PDB; 2TGI; X-ray; --
 DR Genew; HGNC:11768; TGFb2.
 DR MIM; 190220; --
 DR GO; GO:0005615; C:extracellular space; TAS.
 DR GO; GO:0005160; F:transforming growth factor beta receptor bi.; TAS.
 DR GO; GO:0008283; P:cell proliferation; TAS.
 DR GO; GO:0007267; P:cell-cell signaling; TAS.
 DR GO; GO:0007165; P:signal transduction; TAS.
 DR InterPro; IPR002400; GF_cysknot.
 DR InterPro; IPR001839; TGFb_N.
 DR InterPro; IPR001839; TGFb_N.
 DR InterPro; IPR003911; TGF_TGFB.
 DR Pfam; PF00688; TGFb_propeptide; 1.
 DR Pfam; PF00019; TGF_beta; 1.
 DR PRINTS; PR00438; GFCYSKNOT.
 DR PRINTS; PR01423; TGFbBETA.
 DR ProDom; PD000357; TGFb; 1.
 DR SMART; SM00204; TGFb; 1.
 DR PROSITE; PS00250; TGF_BETA_1; 1.
 DR 3D-structure; Alternative splicing; Direct protein sequencing;
 KW Glycoprotein; Growth factor; Mitogen; Signal.
 FT SIGNAL 1 19 Potential.
 FT PROPEP 20 302 Transforming growth factor beta 2.
 FT CHAIN 303 414
 FT DISULFID 309 318
 FT DISULFID 317 380
 FT DISULFID 346 411
 FT DISULFID 350 413
 FT DISULFID 379 379
 FT CARBOHYD 72 72
 FT CARBOHYD 140 140
 FT CARBOHYD 241 241
 FT VARSPLIC 116 116
 FT FT
 FT VARIANT 91 91
 FT FT
 FT VARIANT 207 207
 FT FT
 FT CONFLICT 32 32
 FT HELIX 306 309
 FT TURN 310 311
 FT STRAND 316 316
 FT STRAND 318 320
 FT STRAND 323 325
 FT TURN 326 330
 FT HELIX 333 334
 FT TURN 335 337
 FT STRAND 340 342
 FT STRAND 345 347
 FT STRAND 349 349
 FT TURN 352 353
 FT STRAND 356 356
 FT HELIX 359 370
 FT STRAND 372 374
 FT STRAND 380 382
 FT STRAND 385 394
 FT TURN 395 396
 FT STRAND 397 408
 FT STRAND 411 414
 SQ SEQUENCE 414 AA; 47747 MW; 7D9D569E0F4A07D0 CRC64;
 Query Match 100.0%; Score 163; DB 1; Length 414;
 Best Local Similarity 100.0%; Pred. No. 15e-15;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 29
DB 303 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 331

RESULT 10
TGF2_PIG STANDARD; PRT; 435 AA.

AC P09858;
DT 01-MAR-1989 (Rel. 10, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Transforming growth factor beta 2 precursor (TGF-beta 2).
GN Name=TGFbeta2;
OS Sus scrofa (Pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX NCBI_TaxID=9823;
RN [1]
RP SEQUENCE OF 2-435 FROM N.A.
RC TISSUE=Lung;
RA Zhou Y.;
RL Submitted (DEC-1992) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE OF 303-345.
RX MEDLINE=87102890; PubMed=2879635;
RA Cheifetz S., Weatherbee J.A., Teang M.L.S., Anderson J.K., Mole J.E.,
RA Lucas R., Massague J.;
RT "The transforming growth factor-beta system, a complex pattern of
RT cross-reactive ligands and receptors.";
RL Cell 48:409-415(1987).
CC -!- FUNCTION: TGF-beta 2 has suppressive effects on interleukin-2
CC -!- SUBUNIT: Homodimer; disulfide-linked.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the TGF-beta family.

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CC EMBL; L08375; AAB03850.1; -;
DR HSSP; P08112; 2TGI.
DR InterPro; IPR002400; GP cystknot.
DR InterPro; IPR001839; TGFb_N.
DR InterPro; IPR001111; TGFb_N.
DR InterPro; IPR003911; TGF_TGFB.
DR Pfam; PF00688; TGFb_propeptide; 1.
DR Pfam; PF00019; TGF_beta; 1.
DR PRINTS; PR00438; GFCYKNOT.
DR PRINTS; PR01423; TGFbeta.
DR ProDom; PD000357; TGFb; 1.
DR SMART; SMO0204; TGFb; 1.
DR PROSITE; PS00250; TGF_BETA_1; 1.
KW Direct protein sequencing; Glycoprotein; Growth factor; Mitogen;
KW Signal.
FT SIGNAL 1 19 Potential.
FT PROPEP 20 302
FT CHAIN 303 435 Transforming growth factor beta 2.
FT DISULFID 309 318 By similarity.
FT DISULFID 317 380 By similarity.
FT DISULFID 346 411 By similarity.
FT DISULFID 350 413 By similarity.
FT DISULFID 379 379 Interchain (By similarity).
FT CARBOHYD 72 72 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 140 140 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 241 241 N-linked (GlcNAc...) (Potential).

SQ SEQUENCE 435 AA; 49922 MW; 438282E288B32322 CRC64;

Query Match 100.0%; Score 163; DB 1; Length 435;
Best Local Similarity 100.0%; Pred. No. 1.6e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 29
DB 303 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 331

RESULT 11
TGF2_RAT STANDARD; PRT; 442 AA.

AC Q07257; Q63574; Q9QW26; Q9R281; Q9R298; Q9R2B8; Q9WUQ8;
DT 01-OCT-1994 (Rel. 30, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Transforming growth factor beta 2 precursor (TGF-beta 2).
GN Name=Tgfb2;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS TGF-BETA2A AND TGF-BETA2B).
RC STRAIN=Wistar; TISSUE=Muscle;
RA Koishi K., Dalzell K.G.B., McLennan I.S.;
RT "Structure and expression of TGF-beta 2 messages in the rat muscle.";
RL Submitted (MAY-1999) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A. (ISOFORM TGF-BETA2A).
RC STRAIN=Wistar;
RA Konrad L., Albrecht M., Ammuller G.;
RT "The rat TGF-beta2 gene: sequence analysis and expression pattern in
RT the rat testis.";
RL Submitted (FEB-1999) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A. (ISOFORM TGF-BETA2A).
RA Plisov S., Ivanov S.V., Plisova T.M., Lerman M., Perantoni A.O.;
RT "Rat transforming growth factor-beta2, complete coding sequence.";
RL Submitted (MAR-1999) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE OF 278-348 FROM N.A.
RX MEDLINE=9286190; PubMed=9509457;
RA McKinnon R.D., Piras G., Ida J., Dubois-Daig M.;
RT "A role for TGF-beta in oligodendrocyte differentiation.";
RL J. Cell Biol. 121:1397-1407(1993).
RN [5]
RP SEQUENCE OF 366-441 FROM N.A.
RC STRAIN=Sprague-Dawley; TISSUE=Heart;
RX MEDLINE=93253033; PubMed=8486763;
RA Nishida M., Springhorn J.P., Kelly R.A., Smith T.W.;
RT "Cell-cell signaling between adult rat ventricular myocytes and
RT cardiac microvascular endothelial cells in heterotypic primary
RT culture.";
RL J. Clin. Invest. 91:1934-1941(1993).
CC -!- FUNCTION: TGF-beta 2 has suppressive effects on interleukin-2
CC -!- dependent T-cell growth.
CC -!- SUBUNIT: Homodimer; disulfide-linked.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=2;
CC Name=TGF-beta2B;
CC IsoId=Q07257-1; Sequence=Displayed;
CC Name=TGF-beta2A;
CC IsoId=Q07257-2; Sequence=VSP_006418, VSP_006419;
CC -!- SIMILARITY: Belongs to the TGF-beta family.

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DR EMBL; AF153012; AAD34159.1; -
 DR EMBL; AF153012; CAB42003.1; -
 DR EMBL; AF153013; AAD34160.1; -
 DR EMBL; AF153598; AAD24484.1; -
 DR EMBL; X71904; CAA50723.1; -
 DR EMBL; M56643; AAA88514.1; ALT_SEQ.
 DR PIR; A40699; A40699.
 DR HSP; P08112; 2TGB2.
 DR RGD; 70491; Tgfb2.
 DR InterPro; IPR002400; GF_cysknot.
 DR InterPro; IPR001839; TGFb.
 DR InterPro; IPR001111; TGFb N.
 DR InterPro; IPR003911; TGF_TGFb.
 DR Pfam; PF00688; TGFb_propeptide; 1.
 DR Pfam; PF00019; TGF_beta; 1.
 DR PRINTS; PR01423; TGFbBETA.
 DR PRINTS; PR00438; GFCYSKNOT.
 DR PRODOM; PD000357; TGFb; 1.
 DR SMART; SMO0204; TGFb; 1.
 DR PROSITE; PS00250; TGF_BETA_1; 1.
 DR Growth factor.
 DR SQ SEQUENCE 442 AA; 50533 MW; AFB64148E893C93E CRC64;

Query Match 100.0%; Score 163; DB 2; Length 442;
 Best Local Similarity 100.0%; Pred. No. 1.6e-15;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
 |||||
 Db 331 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 359

RESULT 13
 AAR06973 PRELIMINARY; PRT; 442 AA.

ID AAR06973
 AC AAR06973; 27, Created
 DT 02-MAR-2004 (T-EMBLrel. 27, Last sequence update)
 DT 02-MAR-2004 (T-EMBLrel. 27, Last sequence update)
 DT 02-MAR-2004 (T-EMBLrel. 27, Last annotation update)
 DE Transforming growth factor-beta 2.
 OS Oryctolagus cuniculus (Rabbit).
 OC Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC NCB1_TaxID=9986;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Zhang J., Man X.;
 RT "Cloning of rabbit transforming growth factor beta 2.";
 RL Submitted (OCT-2003) to the EMBL/GenBank/DBJ databases.
 RE EMBL; AY429466; AAR06973.1; -
 SQ SEQUENCE 442 AA; 50533 MW; AFB64148E893C93E CRC64;

Query Match 100.0%; Score 163; DB 2; Length 442;
 Best Local Similarity 100.0%; Pred. No. 1.6e-15;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
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 Db 331 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 359

RESULT 14
 TGF2_XENLA STANDARD; PRT; 413 AA.

ID TGF2_XENLA
 AC P17247;
 DT 01-AUG-1990 (Rel. 15, Created)
 DT 01-AUG-1990 (Rel. 15, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Transforming growth factor beta 2 precursor (TGF-beta 2).
 OS Xenopus laevis (African clawed frog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidae; Pipidae;
 OC Xenopodinae; Xenopus.
 OC NCB1_TaxID=8355;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Zhang J., Man X.;
 RT Submitted (OCT-2003) to the EMBL/GenBank/DBJ databases.
 RE EMBL; AY429466; AAR06973.1; -
 SQ SEQUENCE 413 AA; 50533 MW; AFB64148E893C93E CRC64;

DR InterPro; IPR002400; GF_cysknot.

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 31, 2004, 14:17:05 ; Search time 37 seconds
(without alignments)
254.115 Million cell updates/sec

Title: US-09-822-873-1

Perfect score: 163

Sequence: 1 ALDAAFCFRNVQNCCLRLYLIDFKRDLG 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1370721 seqs, 324215800 residues

Total number of hits satisfying chosen parameters: 1370721

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
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- 12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
- 13: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
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- 17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
- 19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	163	100.0	29	9	US-09-822-873-1
2	163	100.0	29	14	US-10-240-421-1
3	163	100.0	60	10	US-09-791-301-123
4	163	100.0	70	9	US-09-848-664-10
5	163	100.0	112	9	US-09-813-271B-4
6	163	100.0	112	9	US-09-813-271B-10
7	163	100.0	112	14	US-10-366-345-55
8	163	100.0	113	9	US-09-813-398-14
9	163	100.0	114	9	US-09-389-705-24
10	163	100.0	114	9	US-09-813-459-23
11	163	100.0	114	13	US-10-115-406-22
12	163	100.0	114	14	US-10-154-333-24
13	163	100.0	114	16	US-10-704-223-22

14	163	100.0	115	9	US-09-859-211-48	Sequence 48, Appl
15	163	100.0	115	9	US-09-880-708-26	Sequence 26, Appl
16	163	100.0	115	10	US-09-872-856-48	Sequence 48, Appl
17	163	100.0	115	14	US-10-335-483-30	Sequence 30, Appl
18	163	100.0	115	15	US-10-463-973-48	Sequence 48, Appl
19	163	100.0	115	15	US-10-693-536-20	Sequence 20, Appl
20	163	100.0	115	16	US-10-758-210-20	Sequence 20, Appl
21	163	100.0	387	15	US-10-080-334-68	Sequence 68, Appl
22	163	100.0	412	10	US-09-214-592-30	Sequence 30, Appl
23	163	100.0	414	9	US-09-756-283A-24	Sequence 24, Appl
24	163	100.0	414	10	US-09-214-592-18	Sequence 18, Appl
25	163	100.0	414	10	US-09-214-592-21	Sequence 21, Appl
26	163	100.0	414	15	US-10-080-334-204	Sequence 204, Appl
27	163	100.0	414	15	US-10-080-334-207	Sequence 207, Appl
28	163	100.0	414	15	US-10-058-270A-116	Sequence 116, Appl
29	163	100.0	434	15	US-10-080-334-206	Sequence 206, Appl
30	163	100.0	435	15	US-10-080-334-205	Sequence 205, Appl
31	163	100.0	442	14	US-10-366-345-47	Sequence 47, Appl
32	163	100.0	442	15	US-10-080-334-203	Sequence 203, Appl
33	133	81.6	60	10	US-09-791-301-124	Sequence 124, Appl
34	133	81.6	70	9	US-09-848-664-11	Sequence 11, Appl
35	133	81.6	112	9	US-09-813-271B-6	Sequence 6, Appl
36	133	81.6	112	9	US-09-813-271B-12	Sequence 12, Appl
37	133	81.6	112	14	US-10-366-345-56	Sequence 56, Appl
38	133	81.6	113	9	US-09-813-398-15	Sequence 15, Appl
39	133	81.6	114	9	US-09-389-705-25	Sequence 25, Appl
40	133	81.6	114	9	US-09-813-459-24	Sequence 24, Appl
41	133	81.6	114	13	US-10-115-406-23	Sequence 23, Appl
42	133	81.6	114	14	US-10-154-333-25	Sequence 25, Appl
43	133	81.6	114	16	US-10-704-223-23	Sequence 23, Appl
44	133	81.6	115	9	US-09-859-211-49	Sequence 49, Appl
45	133	81.6	115	9	US-09-880-708-27	Sequence 27, Appl

ALIGNMENTS

RESULT 1

US-09-822-873-1
; Sequence 1, Application US/09822873
; Patent No. US20020160012A1
; GENERAL INFORMATION:
; APPLICANT: KAASTRUP, Peter
; TITLE OF INVENTION: VACCINE CHIP TECHNOLOGY EXPLOITING IMMUNO-STIMULATING FRAGMENT OF
; FILE REFERENCE: KAASTRUP-1A
; CURRENT APPLICATION NUMBER: US/09/822,873
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: US 60/246,973
; PRIOR FILING DATE: 2000-11-13
; PRIOR APPLICATION NUMBER: DK PA2000 00540
; PRIOR FILING DATE: 2000-03-31
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 1
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-822-873-1

Query Match 100.0%; Score 163; DB 9; Length 29;
Best Local Similarity 100.0%; Pred. No. 1.8e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQNCCLRLYLIDFKRDLG 29
Db 1 ALDAAFCFRNVQNCCLRLYLIDFKRDLG 29

RESULT 2

US-10-240-421-1
; Sequence 1, Application US/10240421
; Publication No. US20030190322A1

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; GENERAL INFORMATION:
; APPLICANT: KASTRUP, Peter
; TITLE OF INVENTION: IMMUNOSTIMULATING PROPERTIES OF A FRAGMENT OF TGF-BETA
; FILE REFERENCE: KASTRUP-2
; CURRENT APPLICATION NUMBER: US/10/240,421
; CURRENT FILING DATE: 2002-09-30
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-240-421-1

Query Match          100.0%; Score 163; DB 14; Length 29;
Best Local Similarity 100.0%; Pred. No. 1.8e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 3
US-09-791-301-123
; Sequence 123, Application US/09791301
; Publication No. US20030064943A1
; GENERAL INFORMATION:
; APPLICANT: Pagratis, Nikos
; APPLICANT: Lochrie, Michael
; APPLICANT: Gold, Larry
; TITLE OF INVENTION: High Affinity TGFbeta Nucleic Acid Ligands and
; TITLE OF INVENTION: Inhibitors
; FILE REFERENCE: NEX 87/C
; CURRENT APPLICATION NUMBER: US/09/791,301
; CURRENT FILING DATE: 2001-02-23
; PRIOR FILING DATE: 2001-02-23
; PRIOR FILING DATE: 1998-03-23
; PRIOR FILING DATE: 08/046,247
; PRIOR FILING DATE: 1995-06-02
; PRIOR FILING DATE: 07/714,131
; PRIOR FILING DATE: 1991-06-10
; PRIOR FILING DATE: 07/931,473
; PRIOR FILING DATE: 1992-08-17
; PRIOR FILING DATE: 07/964,624
; PRIOR FILING DATE: 1992-10-21
; PRIOR FILING DATE: 08/117,991
; PRIOR FILING DATE: 1993-09-08
; PRIOR FILING DATE: 07/536,428
; PRIOR FILING DATE: 1990-06-11
; PRIOR FILING DATE: 09/363,939
; PRIOR FILING DATE: 1999-07-29
; NUMBER OF SEQ ID NOS: 216
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 123
; LENGTH: 60
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Sequence
US-09-791-301-123

Query Match          100.0%; Score 163; DB 10; Length 60;
Best Local Similarity 100.0%; Pred. No. 3.8e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 4
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US-09-848-664-10
; Sequence 10, Application US/09848664
; Patent No. US20020146144A1
; GENERAL INFORMATION:
; APPLICANT: Sakiyama-Elbert, Shelly E.
; APPLICANT: Hubbell, Jeffrey A.
; TITLE OF INVENTION: Controlled Release of No. US20020146144A1-Heparin Binding Growth
; TITLE OF INVENTION: Factors from Heparin Containing Matrices
; FILE REFERENCE: ETH 108
; CURRENT APPLICATION NUMBER: US/09/848,664
; CURRENT FILING DATE: 2001-05-03
; PRIOR APPLICATION NUMBER: 09/298,084
; PRIOR FILING DATE: 1999-04-22
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 10
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-848-664-10

Query Match          100.0%; Score 163; DB 9; Length 70;
Best Local Similarity 100.0%; Pred. No. 4.4e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 5
US-09-813-271B-4
; Sequence 4, Application US/09813271B
; Patent No. US20020115834A1
; GENERAL INFORMATION:
; APPLICANT: (A) Nico Cerletti
; TITLE OF INVENTION: New process for the production of
; TITLE OF INVENTION: Biologically active protein
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. US20020115834A1artis Patent Department
; STREET: 564 Morris Avenue
; CITY: Summit
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07901
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30 (BPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/813,271B
; FILING DATE: 20-Mar-2001
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/EP95/02719
; FILING DATE: 12-Jul-95
; APPLICATION NUMBER: EPO 94810439.3
; FILING DATE: 25-Jul-94
; ATTORNEY/AGENT INFORMATION:
; NAME: Pfeiffer, Hessa J.
; REGISTRATION NUMBER: 22640
; REFERENCE/DOCKET NUMBER: 4-20039C/C1C1/USN
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (908) 522-6940
; TELEFAX: (908) 522-6955
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 112 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
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RESULT 7

OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/153,733
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 114 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta 2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..114
SEQUENCE DESCRIPTION: SEQ ID NO: 24:
US-09-389-705-24

Query Match 100.0%; Score 163; DB 9; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.le-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCLRLPLYIDFKRDLG 29
DB 3 ALDAAYCFRNVDNCCLRLPLYIDFKRDLG 31

RESULT 10
US-09-813-459-23
Sequence 23, Application US/09813459
Patent No. US20020107369A1
GENERAL INFORMATION:
APPLICANT: Lee, Se-Jin
Cunningham, No. US20020107369Aleen
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-10
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East, Suite 500
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/813,459
FILING DATE: 20-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/624,635
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr., Ph.D., John R.,
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: PD-3054
TELECOMMUNICATION INFORMATION:

TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 114 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..114
SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-09-813-459-23

Query Match 100.0%; Score 163; DB 9; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.le-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCLRLPLYIDFKRDLG 29
DB 3 ALDAAYCFRNVDNCCLRLPLYIDFKRDLG 31

RESULT 11
US-10-115-406-22
Sequence 22, Application US/10115406
Publication No. US20020127612A1
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
Lee, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
FILE REFERENCE: JHU1190-3
CURRENT APPLICATION NUMBER: US/10/115,406
CURRENT FILING DATE: 2002-04-02
PRIOR APPLICATION NUMBER: 09/301,520
PRIOR FILING DATE: 1999-04-28
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
NUMBER OF SEQ ID NOS: 28
SOFTWARE: PatentIn version 3.0
SEQ ID NO 22
LENGTH: 114
TYPE: PRT
ORGANISM: Homo sapiens
US-10-115-406-22

Query Match 100.0%; Score 163; DB 13; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.le-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCLRLPLYIDFKRDLG 29
DB 3 ALDAAYCFRNVDNCCLRLPLYIDFKRDLG 31

RESULT 12
US-10-154-333-24
Sequence 24, Application US/10154333
Publication No. US20030109684A1
GENERAL INFORMATION:
APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:

ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
STATE: CALIFORNIA
COUNTRY: US
ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: 21-May-2002
CLASSIFICATION: <Unknown>
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
APPLICATION NUMBER: 09/153,733
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: PD2279 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 114 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta 2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..114
SEQUENCE DESCRIPTION: SEQ ID NO: 24:
US-10-154-333-24
Query Match 100.0%; Score 163; DB 14; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAACFRNVQDNCCLRLPLVDFKRDLG 29
Db 3 ALDAAACFRNVQDNCCLRLPLVDFKRDLG 31
RESULT 13
US-10-704-223-22
Sequence 22, Application US/10704223
Publication No. US20040152143A1
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY
APPLICANT: Lee, Se-jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
FILE REFERENCE: JH01190-7
CURRENT APPLICATION NUMBER: US/10/704,223
CURRENT FILING DATE: 2003-11-07
PRIOR APPLICATION NUMBER: US 10/115,406
PRIOR FILING DATE: 2002-04-02
PRIOR APPLICATION NUMBER: US 09/301,520
PRIOR FILING DATE: 1999-04-28
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303

PRIOR FILING DATE: 1993-01-12
NUMBER OF SEQ ID NOS: 28
SOFTWARE: PatentIn version 3.1
SEQ ID NO 22
LENGTH: 114
TYPE: PRT
ORGANISM: Homo sapiens
US-10-704-223-22
Query Match 100.0%; Score 163; DB 16; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAACFRNVQDNCCLRLPLVDFKRDLG 29
Db 3 ALDAAACFRNVQDNCCLRLPLVDFKRDLG 31
RESULT 14
US-09-859-211-48
Sequence 48, Application US/09859211
Patent No. US20020157125A1
GENERAL INFORMATION:
APPLICANT: McPherson, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
FILE REFERENCE: 07265/144001
CURRENT APPLICATION NUMBER: US/09/859,211
CURRENT FILING DATE: 2001-05-15
PRIOR APPLICATION NUMBER: 09/019,070
PRIOR FILING DATE: 1998-02-05
PRIOR APPLICATION NUMBER: 08/862,445
PRIOR FILING DATE: 1997-05-23
PRIOR APPLICATION NUMBER: 08/847,910
PRIOR FILING DATE: 1997-04-28
PRIOR APPLICATION NUMBER: 08/795,071
PRIOR FILING DATE: 1997-02-05
PRIOR APPLICATION NUMBER: 08/525,596
PRIOR FILING DATE: 1995-10-26
PRIOR APPLICATION NUMBER: PCT/US94/03019
PRIOR FILING DATE: 1994-03-18
PRIOR APPLICATION NUMBER: 08/033,923
PRIOR FILING DATE: 1993-03-19
NUMBER OF SEQ ID NOS: 51
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 48
LENGTH: 115
TYPE: PRT
ORGANISM: Homo sapiens
US-09-859-211-48
Query Match 100.0%; Score 163; DB 9; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAACFRNVQDNCCLRLPLVDFKRDLG 29
Db 4 ALDAAACFRNVQDNCCLRLPLVDFKRDLG 32
RESULT 15
US-09-880-708-26
Sequence 26, Application US/09880708
Patent No. US20020165361A1
GENERAL INFORMATION:
APPLICANT: Lee, Se-jin
APPLICANT: Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-5
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: Gray Cary Ware & Freidenrich LLP
STREET: 4365 Executive Drive, Suite 1600
CITY: San Diego

; STATE: CA
; COUNTRY: USA
; ZIP: 92121-2189
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/880,708
; FILING DATE: 12-Jun-2001
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/145,060
; FILING DATE: <Unknown>
; APPLICATION NUMBER: 08/003,144
; FILING DATE: 12-JAN-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Lisa A. Hailer, Ph.D.
; REGISTRATION NUMBER: 38,347
; REFERENCE/DOCKET NUMBER: 07265/057002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 858/677-1456
; TELEFAX: 619/677-1465
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 115 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; IMMEDIATE SOURCE:
; CLONE: TGF-beta-2
; SEQUENCE DESCRIPTION: SEQ ID NO: 26:
US-09-880-708-26

Query Match 100.0%; Score 163; DB 9; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
Db 4 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 32

RESULT 16
US-09-872-856-48
; Sequence 48, Application US/09872856
; Publication No. US20030074680A1
; GENERAL INFORMATION:
; APPLICANT: Lee, Se-Jin
; APPLICANT: McPherson, Alexandra
; TITLE OF INVENTION: Growth Differentiation Factor-8
; FILE REFERENCE: JHU1120-17
; CURRENT APPLICATION NUMBER: US/09/872,856
; CURRENT FILING DATE: 2001-06-01
; PRIOR APPLICATION NUMBER: US 09/124,180
; PRIOR FILING DATE: 1998-07-28
; PRIOR APPLICATION NUMBER: US 09/019,070
; PRIOR FILING DATE: 1998-02-05
; PRIOR APPLICATION NUMBER: US 08/862,445
; PRIOR FILING DATE: 1997-05-23
; PRIOR APPLICATION NUMBER: US 08/847,910
; PRIOR FILING DATE: 1997-04-28
; PRIOR APPLICATION NUMBER: US 08/795,071
; PRIOR FILING DATE: 1997-02-05
; PRIOR APPLICATION NUMBER: US 08/525,596
; PRIOR FILING DATE: 1995-10-25
; PRIOR APPLICATION NUMBER: PCT/US 94/03019
; PRIOR FILING DATE: 1994-03-18
; PRIOR APPLICATION NUMBER: US 08/033,923
; PRIOR FILING DATE: 1993-03-19
; NUMBER OF SEQ ID NOS: 53
; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 48
; LENGTH: 115
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-872-856-48

Query Match 100.0%; Score 163; DB 10; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
Db 4 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 32

RESULT 17
US-10-335-483-30
; Sequence 30, Application US/10335483
; Publication No. US20030120058A1
; GENERAL INFORMATION:
; APPLICANT: Huynh, Thanh
; Lee, Se-Jin
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: US
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/335,483
; FILING DATE: 31-Dec-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/177,860
; FILING DATE: <Unknown>
; APPLICATION NUMBER: 08/525,596
; FILING DATE: 19-SEP-1995
; APPLICATION NUMBER: PCT/US94/07762
; FILING DATE: 08-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Wetherell, Jr., Ph.D., John R.
; REGISTRATION NUMBER: 31,678
; REFERENCE/DOCKET NUMBER: 07265/075001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619-678-5070
; TELEFAX: 619-678-5099
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 115 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; IMMEDIATE SOURCE:
; CLONE: TGF-beta-2
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..115
; SEQUENCE DESCRIPTION: SEQ ID NO: 30:
US-10-335-483-30

Query Match 100.0%; Score 163; DB 14; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

Db 4 ALDAAACFRNVQDNCCLRPYIDFKRDLG 32
|||||

RESULT 18
US-10-463-973-48
; Sequence 48, Application US/10463973
; Publication No. US20040055027A1
; GENERAL INFORMATION:
; APPLICANT: Johns Hopkins University School of Medicine
; APPLICANT: Lee, Se-Jin
; APPLICANT: McPherron, Alexandra
; TITLE OF INVENTION: Growth Differentiation Factor-8
; FILE REFERENCE: JHU1120-17
; CURRENT APPLICATION NUMBER: US/10/463,973
; CURRENT FILING DATE: 2003-06-17
; PRIOR APPLICATION NUMBER: US/09/872,856
; PRIOR FILING DATE: 2001-06-01
; PRIOR APPLICATION NUMBER: US 09/124,180
; PRIOR FILING DATE: 1998-07-28
; PRIOR APPLICATION NUMBER: US 09/019,070
; PRIOR FILING DATE: 1998-02-05
; PRIOR APPLICATION NUMBER: US 08/862,445
; PRIOR FILING DATE: 1997-05-23
; PRIOR APPLICATION NUMBER: US 08/847,910
; PRIOR FILING DATE: 1997-04-28
; PRIOR APPLICATION NUMBER: US 08/795,071
; PRIOR FILING DATE: 1997-02-05
; PRIOR APPLICATION NUMBER: US 08/525,596
; PRIOR FILING DATE: 1995-10-25
; PRIOR APPLICATION NUMBER: PCT/US 94/03019
; PRIOR FILING DATE: 1994-03-18
; PRIOR APPLICATION NUMBER: US 08/033,923
; PRIOR FILING DATE: 1993-03-19
; NUMBER OF SEQ ID NOS: 53
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 48
; LENGTH: 115
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-463-973-48

Query Match 100.0%; Score 163; DB 15; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 ALDAAACFRNVQDNCCLRPYIDFKRDLG 29
|||||

Db 4 ALDAAACFRNVQDNCCLRPYIDFKRDLG 32
|||||

RESULT 19
US-10-693-536-20
; Sequence 20, Application US/10693536
; Publication No. US20040067556A1
; GENERAL INFORMATION:
; APPLICANT: Lee, Se-Jin
; APPLICANT: Huynh, Thanh
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
; NUMBER OF SEQUENCES: 21
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: California
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/693,536
FILING DATE: 23-Oct-2003
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/619,061
FILING DATE: 18-Jul-2000
APPLICATION NUMBER: US/09/097,616
FILING DATE: 15-JUN-1998
APPLICATION NUMBER: US 08/581,529
FILING DATE: 15-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Hallie, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/082001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 678-5070
TELEFAX: (619) 678-5099
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115
SEQUENCE DESCRIPTION: SEQ ID NO: 20:
US-10-693-536-20

Query Match 100.0%; Score 163; DB 15; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 ALDAAACFRNVQDNCCLRPYIDFKRDLG 29
|||||

Db 4 ALDAAACFRNVQDNCCLRPYIDFKRDLG 32
|||||

RESULT 20
US-10-758-210-20
; Sequence 20, Application US/10758210
; Publication No. US20040127696A1
; GENERAL INFORMATION:
; APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
; APPLICANT: LEE, Se-Jin
; APPLICANT: HUYNH, Thanh
; TITLE OF INVENTION: ANTIBODIES BINDING TO GROWTH DIFFERENTIATION FACTOR-7
; FILE REFERENCE: JHU1130-2
; CURRENT APPLICATION NUMBER: US/10/758,210
; CURRENT FILING DATE: 2004-03-14
; PRIOR APPLICATION NUMBER: US/09/412,791D
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/581,528
; PRIOR FILING DATE: 1996-01-09
; PRIOR APPLICATION NUMBER: PCT/US94/07799
; PRIOR FILING DATE: 1994-07-08
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 115
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-758-210-20

Query Match 100.0%; Score 163; DB 16; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 ALDAAACFRNVQDNCCLRPYIDFKRDLG 29
|||||

Db 4 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 32

RESULT 21

US-10-080-334-68

; Sequence 68, Application US/10080334
; Publication No. US2004002584A1

GENERAL INFORMATION:

; APPLICANT: Pena, Carol E. A.

; APPLICANT: Shimkets, Richard A

; APPLICANT: Li, Li

; APPLICANT: Shenoy, Suresh G

; APPLICANT: Kekuda, Ramesh

; APPLICANT: Spytek, Kimberly A

; APPLICANT: Vernet, Corine A. M.

; APPLICANT: Malyankar, Uriel M

; APPLICANT: Guo, Xiaojia

; APPLICANT: Gusev, Vladimir Y

; APPLICANT: Casman, Stacie J

; APPLICANT: Boldog, Ferenc L

; APPLICANT: Furtak, Katarzyna

; APPLICANT: Tchernev, Velizar T

; APPLICANT: Patturajan, Meera

; APPLICANT: Gangolli, Baha A

; APPLICANT: Padigar, Muralidhara

; APPLICANT: Liu, Xiaohong

; APPLICANT: Baumgarther, Jason C.

; APPLICANT: Bauglach, Valerie

; APPLICANT: Spaderna, Steven K

; APPLICANT: Zerhusen, Bryan D

; TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of

; FILE REFERENCE: 21402-275

; CURRENT APPLICATION NUMBER: US/10/080,334

; PRIOR FILING DATE: 2002-02-21

; PRIOR APPLICATION NUMBER: 60/270,523

; PRIOR FILING DATE: 2001-02-21

; PRIOR APPLICATION NUMBER: 60/322,712

; PRIOR FILING DATE: 2001-09-17

; PRIOR APPLICATION NUMBER: 60/311,980

; PRIOR FILING DATE: 2001-08-13

; PRIOR APPLICATION NUMBER: 60/330,307

; PRIOR FILING DATE: 2001-10-18

; PRIOR APPLICATION NUMBER: 60/278,796

; PRIOR FILING DATE: 2001-03-26

; PRIOR APPLICATION NUMBER: 60/281,521

; PRIOR FILING DATE: 2001-04-04

; PRIOR APPLICATION NUMBER: 60/276,677

; PRIOR FILING DATE: 2001-03-16

; PRIOR APPLICATION NUMBER: 60/311,595

; PRIOR FILING DATE: 2001-08-10

; PRIOR APPLICATION NUMBER: 60/270,220

; PRIOR FILING DATE: 2001-02-21

; PRIOR APPLICATION NUMBER: 60/274,295

; PRIOR FILING DATE: 2001-03-08

; PRIOR APPLICATION NUMBER: 60/318,526

; PRIOR FILING DATE: 2001-09-10

; PRIOR APPLICATION NUMBER: 60/286,548

; PRIOR FILING DATE: 2001-04-25

; PRIOR APPLICATION NUMBER: 60/291,765

; PRIOR FILING DATE: 2001-05-17

; PRIOR APPLICATION NUMBER: 60/270,797

; PRIOR FILING DATE: 2001-02-23

; PRIOR APPLICATION NUMBER: 60/276,400

; PRIOR FILING DATE: 2001-03-16

; PRIOR APPLICATION NUMBER: 60/270,810

; PRIOR FILING DATE: 2001-02-23

; NUMBER OF SEQ ID NOS: 388

; SOFTWARE: PatentIn ver. 2.1

; SEQ ID NO 68

; LENGTH: 387

; TYPE: PRT

; ORGANISM: Homo sapiens

US-10-080-334-68

Query Match 100.0%; Score 163; DB 15; Length 387;

Best Local Similarity 100.0%; Pred. No. 2.4e-14;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 29

Db 276 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 304

RESULT 22

US-09-214-592-30

; Sequence 30, Application US/09214592A

; Publication No. US20030027218A1

GENERAL INFORMATION:

; APPLICANT: Yamasaki, Motoo

; APPLICANT: Shibata, Ckenji

; APPLICANT: Sato, Cyasufumi

; TITLE OF INVENTION: PEPTIDES WHICH PROMOTE ACTIVATION OF LATENT TGF- AND METHOD

; FILE REFERENCE: 11060

; CURRENT APPLICATION NUMBER: US/09/214,592A

; CURRENT FILING DATE: 1998-01-18

; NUMBER OF SEQ ID NOS: 34

; SOFTWARE:

; SEQ ID NO 30

; LENGTH: 412

; TYPE: PRT

; ORGANISM: chicken

US-09-214-592-30

Query Match 100.0%; Score 163; DB 10; Length 412;

Best Local Similarity 100.0%; Pred. No. 2.5e-14;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 29

Db 301 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 329

RESULT 23

US-09-756-283A-24

; Sequence 24, Application US/09756283A

; Patent No. US20020151478A1

GENERAL INFORMATION:

; APPLICANT: Chernajovsky, Yuti

; APPLICANT: Dreja, Hanna Stina

; APPLICANT: Adams, Gillian

; TITLE OF INVENTION: Latent Fusion Protein

; FILE REFERENCE: 0623.1000000

; CURRENT APPLICATION NUMBER: US/09/756,283A

; CURRENT FILING DATE: 2001-01-09

; NUMBER OF SEQ ID NOS: 100

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 24

; LENGTH: 414

; TYPE: PRT

; ORGANISM: Homo sapiens

US-09-756-283A-24

Query Match 100.0%; Score 163; DB 9; Length 414;

Best Local Similarity 100.0%; Pred. No. 2.5e-14;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 29

Db 303 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 331

RESULT 24

US-09-214-592-18

; Sequence 18, Application US/09214592A

```

; Publication No. US20030027218A1
; GENERAL INFORMATION:
; APPLICANT: Yamasaki, CwoToo
; APPLICANT: Shibata, Ckenji
; APPLICANT: Sato, Cvasufumi
; TITLE OF INVENTION: PEPTIDES WHICH PROMOTE ACTIVATION OF LATENT TGF- AND METHOD
; TITLE OF INVENTION: OF SCREENING TGF- ACTIVITY-REGULATING COMPOUNDS
; FILE REFERENCE: 11060
; CURRENT APPLICATION NUMBER: US/09/214,592A
; CURRENT FILING DATE: 1999-01-18
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE:
; SEQ ID NO 18
; LENGTH: 414
; TYPE: PRT
; ORGANISM: human
US-09-214-592-18

Query Match          100.0%; Score 163; DB 10; Length 414;
Best Local Similarity 100.0%; Pred. No. 2.5e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 29
Db      303 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 331

RESULT 25
US-09-214-592-21
; Sequence 21, Application US/09214592A
; Publication No. US20030027218A1
; GENERAL INFORMATION:
; APPLICANT: Yamasaki, CwoToo
; APPLICANT: Shibata, Ckenji
; APPLICANT: Sato, Cvasufumi
; TITLE OF INVENTION: PEPTIDES WHICH PROMOTE ACTIVATION OF LATENT TGF- AND METHOD
; TITLE OF INVENTION: OF SCREENING TGF- ACTIVITY-REGULATING COMPOUNDS
; FILE REFERENCE: 11060
; CURRENT APPLICATION NUMBER: US/09/214,592A
; CURRENT FILING DATE: 1999-01-18
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE:
; SEQ ID NO 21
; LENGTH: 414
; TYPE: PRT
; ORGANISM: murine
US-09-214-592-21

Query Match          100.0%; Score 163; DB 10; Length 414;
Best Local Similarity 100.0%; Pred. No. 2.5e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 29
Db      303 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 331

RESULT 26
US-10-080-334-204
; Sequence 204, Application US/10080334
; Publication No. US20040002584A1
; GENERAL INFORMATION:
; APPLICANT: Pena, Carol E. A.
; APPLICANT: Shimkets, Richard A
; APPLICANT: Li, Li
; APPLICANT: Shenoy, Suresh G
; APPLICANT: Kekuda, Ramesh
; APPLICANT: Spytek, Kimberly A
; APPLICANT: Vernet, Corine A. M.
; APPLICANT: Malyankar, Uriel M
; APPLICANT: Guo, Xiaojia
; APPLICANT: Gusev, Vladimir Y
; APPLICANT: Casman, Stacie J

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; APPLICANT: Boldog, Ferenc L
; APPLICANT: Furtak, Katarzyna
; APPLICANT: Tchernev, Velizar T
; APPLICANT: Patturajan, Meera
; APPLICANT: Gangolli, Esha A
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Liu, Xiaohong
; APPLICANT: Baumgartner, Jason C.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Spaderna, Steven K
; APPLICANT: Zernhusen, Bryan D
; TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
; FILE REFERENCE: 21402-275
; CURRENT APPLICATION NUMBER: US/10/080,334
; CURRENT FILING DATE: 2002-02-21
; PRIOR APPLICATION NUMBER: 60/270,523
; PRIOR FILING DATE: 2001-02-21
; PRIOR APPLICATION NUMBER: 60/322,712
; PRIOR FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: 60/311,980
; PRIOR FILING DATE: 2001-08-13
; PRIOR APPLICATION NUMBER: 60/330,307
; PRIOR FILING DATE: 2001-10-18
; PRIOR APPLICATION NUMBER: 60/278,796
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: 60/281,521
; PRIOR FILING DATE: 2001-04-04
; PRIOR APPLICATION NUMBER: 60/276,677
; PRIOR FILING DATE: 2001-03-15
; PRIOR APPLICATION NUMBER: 60/311,595
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/270,220
; PRIOR FILING DATE: 2001-02-21
; PRIOR APPLICATION NUMBER: 60/274,295
; PRIOR FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: 60/318,526
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: 60/286,548
; PRIOR FILING DATE: 2001-04-25
; PRIOR APPLICATION NUMBER: 60/291,765
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: 60/270,797
; PRIOR FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 60/276,400
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/270,810
; PRIOR FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 388
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 204
; LENGTH: 414
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-080-334-204

Query Match          100.0%; Score 163; DB 15; Length 414;
Best Local Similarity 100.0%; Pred. No. 2.5e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 29
Db      303 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 331

RESULT 27
US-10-080-334-207
; Sequence 207, Application US/10080334
; Publication No. US20040002584A1
; GENERAL INFORMATION:
; APPLICANT: Pena, Carol E. A.
; APPLICANT: Shimkets, Richard A
; APPLICANT: Li, Li

```

APPLICANT: Shenoy, Suresh G
APPLICANT: Kekuda, Ramesh
APPLICANT: Spytek, Kimberly A.
APPLICANT: Vernet, Corine A. M.
APPLICANT: Malyankar, Uriel M.
APPLICANT: Guo, Xiaojia
APPLICANT: Gusev, Vladimir Y
APPLICANT: Casman, Stacie J
APPLICANT: Boldog, Ferenc L
APPLICANT: Furtak, Katarzyna
APPLICANT: Tchernev, Velizar T
APPLICANT: Patturajan, Meera
APPLICANT: Gangolli, Esha A
APPLICANT: Padigar, Muralidhara
APPLICANT: Liu, Xiaohong
APPLICANT: Baumgartner, Jason C.
APPLICANT: Gerlach, Valerie
APPLICANT: Spaderna, Steven K
APPLICANT: Zerhusen, Bryan D
TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
TITLE OF INVENTION: Using the Same
FILE REFERENCE: 21402-275
CURRENT APPLICATION NUMBER: US/10/080,334
CURRENT FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 60/270,523
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR FILING DATE: 2001-09-17
PRIOR APPLICATION NUMBER: 60/311,980
PRIOR FILING DATE: 2001-08-13
PRIOR APPLICATION NUMBER: 60/330,307
PRIOR FILING DATE: 2001-10-19
PRIOR APPLICATION NUMBER: 60/278,796
PRIOR FILING DATE: 2001-03-26
PRIOR APPLICATION NUMBER: 60/281,521
PRIOR FILING DATE: 2001-04-04
PRIOR APPLICATION NUMBER: 60/276,677
PRIOR FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: 60/311,595
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/270,220
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: 60/274,295
PRIOR FILING DATE: 2001-03-08
PRIOR APPLICATION NUMBER: 60/318,526
PRIOR FILING DATE: 2001-09-10
PRIOR APPLICATION NUMBER: 60/286,548
PRIOR FILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: 60/291,765
PRIOR FILING DATE: 2001-05-17
PRIOR APPLICATION NUMBER: 60/270,797
PRIOR FILING DATE: 2001-02-23
PRIOR APPLICATION NUMBER: 60/276,400
PRIOR FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: 60/270,810
PRIOR FILING DATE: 2001-02-23
NUMBER OF SEQ ID NOS: 388
SOFTWARE: Patent in Ver. 2.1
SEQ ID NO 207
LENGTH: 414
TYPE: PRT
ORGANISM: Homo sapiens
US-10-080-334-207

Query Match 100.0%; Score 163; DB 15; Length 414;
Best Local Similarity 100.0%; Pred. No. 2.5e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAACFRNVQDNCCLRPYIDFKRDLG 29
DB 303 ALDAAACFRNVQDNCCLRPYIDFKRDLG 331

RESULT 28
US-10-058-270A-116
; Sequence 116, Application US/10058270A
; Publication No. US20040029114A1
; GENERAL INFORMATION:
; APPLICANT: Mack, David H.
; APPLICANT: Gish, Kurt C.
; APPLICANT: Afar, Daniel
; APPLICANT: Eos Biotechnology, Inc.
; TITLE OF INVENTION: Methods of Diagnosis of Breast Cancer, Compositions and
; FILE REFERENCE: 018501-005210US
; CURRENT APPLICATION NUMBER: US/10/058,270A
; CURRENT FILING DATE: 2002-01-24
; PRIOR APPLICATION NUMBER: US 60/263,965
; PRIOR FILING DATE: 2001-01-24
; PRIOR APPLICATION NUMBER: US 60/265,928
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 09/829,472
; PRIOR FILING DATE: 2001-04-09
; PRIOR APPLICATION NUMBER: US 60/282,698
; PRIOR FILING DATE: 2001-04-09
; PRIOR APPLICATION NUMBER: US 60/288,590
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/294,443
; PRIOR FILING DATE: 2001-05-29
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 116
; LENGTH: 414
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-058-270A-116

Query Match 100.0%; Score 163; DB 15; Length 414;
Best Local Similarity 100.0%; Pred. No. 2.5e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAACFRNVQDNCCLRPYIDFKRDLG 29
DB 303 ALDAAACFRNVQDNCCLRPYIDFKRDLG 331

RESULT 29
US-10-080-334-206
; Sequence 206, Application US/10080334
; Publication No. US20040002584A1
; GENERAL INFORMATION:
; APPLICANT: Pena, Carol E. A.
; APPLICANT: Shimkets, Richard A.
; APPLICANT: Li, Li
; APPLICANT: Shenoy, Suresh G
; APPLICANT: Kekuda, Ramesh
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Vernet, Corine A. M.
; APPLICANT: Malyankar, Uriel M.
; APPLICANT: Guo, Xiaojia
; APPLICANT: Gusev, Vladimir Y
; APPLICANT: Casman, Stacie J
; APPLICANT: Boldog, Ferenc L
; APPLICANT: Furtak, Katarzyna
; APPLICANT: Tchernev, Velizar T
; APPLICANT: Patturajan, Meera
; APPLICANT: Gangolli, Esha A
; APPLICANT: Padigar, Muralidhara
; APPLICANT: Liu, Xiaohong
; APPLICANT: Baumgartner, Jason C.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Spaderna, Steven K
; APPLICANT: Zerhusen, Bryan D
; TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
; FILE REFERENCE: 21402-275

APPLICANT: Liu, Xiaohong
APPLICANT: Baumgartner, Jason C.
APPLICANT: Gerlach, Valerie
APPLICANT: Spaderna, Steven K
APPLICANT: Zernusen, Bryan D
TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
FILE REFERENCE: 21402-275
CURRENT APPLICATION NUMBER: US/10/080,334
CURRENT FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 60/270,523
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR FILING DATE: 2001-09-17
PRIOR APPLICATION NUMBER: 60/311,980
PRIOR FILING DATE: 2001-08-13
PRIOR APPLICATION NUMBER: 60/330,307
PRIOR FILING DATE: 2001-10-18
PRIOR APPLICATION NUMBER: 60/278,796
PRIOR FILING DATE: 2001-03-26
PRIOR APPLICATION NUMBER: 60/281,521
PRIOR FILING DATE: 2001-04-04
PRIOR APPLICATION NUMBER: 60/276,677
PRIOR FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: 60/311,595
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/270,220
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: 60/274,295
PRIOR FILING DATE: 2001-03-08
PRIOR APPLICATION NUMBER: 60/318,526
PRIOR FILING DATE: 2001-09-10
PRIOR APPLICATION NUMBER: 60/286,548
PRIOR FILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: 60/291,765
PRIOR FILING DATE: 2001-05-17
PRIOR APPLICATION NUMBER: 60/270,797
PRIOR FILING DATE: 2001-02-23
PRIOR APPLICATION NUMBER: 60/276,400
PRIOR FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: 60/270,810
PRIOR FILING DATE: 2001-02-23
NUMBER OF SEQ ID NOS: 388
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 206
LENGTH: 434
TYPE: PRT
ORGANISM: Mus musculus
US-10-080-334-206

Query Match 100.0%; Score 163; DB 15; Length 434;
Best Local Similarity 100.0%; Pred. No. 2.7e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 ALDAAVCFRNVQNCCLRPYIDFKRDLG 29
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Db 302 ALDAAVCFRNVQNCCLRPYIDFKRDLG 330

RESULT 30
US-10-080-334-205
Sequence 205, Application US/10080334
Publication No. US20040002584A1
GENERAL INFORMATION:
APPLICANT: Pena, Carol E. A.
APPLICANT: Shimkets, Richard A
APPLICANT: Li, Li
APPLICANT: Shenoy, Suresh G
APPLICANT: Kekuda, Ramesh
APPLICANT: Spytek, Kimberly A
APPLICANT: Vernet, Corine A. M.
APPLICANT: Malyankar, Uriel M
APPLICANT: Guo, Xiaojia
APPLICANT: Gusev, Vladimir Y
APPLICANT: Casman, Stacie J
APPLICANT: Boldog, Ferenc L
APPLICANT: Furtak, Katarzyna
APPLICANT: Tchernev, Velizar T
APPLICANT: Patturajan, Meera
APPLICANT: Gangolli, Esha A
APPLICANT: Padigaru, Muralidhara

APPLICANT: Liu, Xiaohong
APPLICANT: Baumgartner, Jason C.
APPLICANT: Gerlach, Valerie
APPLICANT: Spaderna, Steven K
APPLICANT: Zernusen, Bryan D
TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
FILE REFERENCE: 21402-275
CURRENT APPLICATION NUMBER: US/10/080,334
CURRENT FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 60/270,523
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR FILING DATE: 2001-09-17
PRIOR APPLICATION NUMBER: 60/311,980
PRIOR FILING DATE: 2001-08-13
PRIOR APPLICATION NUMBER: 60/330,307
PRIOR FILING DATE: 2001-10-18
PRIOR APPLICATION NUMBER: 60/278,796
PRIOR FILING DATE: 2001-03-26
PRIOR APPLICATION NUMBER: 60/281,521
PRIOR FILING DATE: 2001-04-04
PRIOR APPLICATION NUMBER: 60/276,677
PRIOR FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: 60/311,595
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/270,220
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: 60/274,295
PRIOR FILING DATE: 2001-03-08
PRIOR APPLICATION NUMBER: 60/318,526
PRIOR FILING DATE: 2001-09-10
PRIOR APPLICATION NUMBER: 60/286,548
PRIOR FILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: 60/291,765
PRIOR FILING DATE: 2001-05-17
PRIOR APPLICATION NUMBER: 60/270,797
PRIOR FILING DATE: 2001-02-23
PRIOR APPLICATION NUMBER: 60/276,400
PRIOR FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: 60/270,810
PRIOR FILING DATE: 2001-02-23
NUMBER OF SEQ ID NOS: 388
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 205
LENGTH: 435
TYPE: PRT
ORGANISM: Sus scrofa
US-10-080-334-205

Query Match 100.0%; Score 163; DB 15; Length 435;
Best Local Similarity 100.0%; Pred. No. 2.7e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 ALDAAVCFRNVQNCCLRPYIDFKRDLG 29
|||||
Db 303 ALDAAVCFRNVQNCCLRPYIDFKRDLG 331

RESULT 31
US-10-366-345-47
Sequence 47, Application US/10366345
Publication No. US20030224501A1
GENERAL INFORMATION:
APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polypeptides and
TITLE OF INVENTION: Antibodies
FILE REFERENCE: PT189
CURRENT APPLICATION NUMBER: US/10/366,345
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
SOFTWARE: PatentIn version 3.2
SEQ ID NO 47

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; LENGTH: 442
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-366-345-47

Query Match      100.0%; Score 163; DB 14; Length 442;
Best Local Similarity 100.0%; Pred. No. 2.7e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
Db 331 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 359

RESULT 32
US-10-080-334-203
; Sequence 203, Application US/10080334
; Publication No. US20040002584A1
; GENERAL INFORMATION:
; APPLICANT: Pena, Carol E. A.
; APPLICANT: Shimkets, Richard A
; APPLICANT: Li, Li
; APPLICANT: Shenoy, Suresh G
; APPLICANT: Kekuda, Ramesh
; APPLICANT: Spytek, Kimberly A
; APPLICANT: Vernet, Corine A. M.
; APPLICANT: Malyankar, Uriel M
; APPLICANT: Guo, Xiaojia
; APPLICANT: Gusev, Vladimir Y
; APPLICANT: Casman, Stacie J
; APPLICANT: Boldog, Ferenc L
; APPLICANT: Furtak, Katarzyna
; APPLICANT: Tchernev, Velizar T
; APPLICANT: Patturajan, Meera
; APPLICANT: Gangolli, Esha A
; APPLICANT: Padigar, Muralidhara
; APPLICANT: Liu, Xiachong
; APPLICANT: Baumgartner, Jason C.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Spaderna, Steven K
; APPLICANT: Zernhusen, Bryan D
; TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
; FILE REFERENCE: 21402-275
; CURRENT APPLICATION NUMBER: US/10/080,334
; PRIOR FILING DATE: 2002-02-21
; PRIOR APPLICATION NUMBER: 60/270,523
; PRIOR FILING DATE: 2001-02-21
; PRIOR APPLICATION NUMBER: 60/322,712
; PRIOR FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: 60/311,980
; PRIOR FILING DATE: 2001-08-13
; PRIOR APPLICATION NUMBER: 60/330,307
; PRIOR FILING DATE: 2001-10-18
; PRIOR APPLICATION NUMBER: 60/278,796
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: 60/281,521
; PRIOR FILING DATE: 2001-04-04
; PRIOR APPLICATION NUMBER: 60/276,577
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/311,595
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/270,220
; PRIOR FILING DATE: 2001-02-21
; PRIOR APPLICATION NUMBER: 60/274,295
; PRIOR FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: 60/318,526
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: 60/286,548
; PRIOR FILING DATE: 2001-04-25
; PRIOR APPLICATION NUMBER: 60/291,765
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: 60/270,797
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; PRIOR FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 60/276,400
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/270,810
; PRIOR FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 388
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 203
; LENGTH: 442
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-080-334-203

Query Match      100.0%; Score 163; DB 15; Length 442;
Best Local Similarity 100.0%; Pred. No. 2.7e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
Db 331 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 359

Search completed: October 31, 2004, 14:29:07
Job time : 37 secs
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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 29, 2004, 08:31:14 ; Search time 58 Seconds
(without alignments)
287.687 Million call updates/sec

Title: US-09-822-873-1

Perfect score: 163

Sequence: 1 ALDAAYCFRNVQDNCCLRPYIDFKRDLG 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 28853

Minimum DB seq length: 0

Maximum DB seq length: 29

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	59	36.2	20	2	Q6UQN2	Q6UQN2 anomalospiz
2	59	36.2	20	2	Q6UQN3	Q6UQN3 vidua orien
3	59	36.2	20	2	Q6UQN4	Q6UQN4 vidua parad
4	59	36.2	20	2	Q6UQN5	Q6UQN5 vidua obtus
5	59	36.2	20	2	Q6UQN6	Q6UQN6 vidua hypoc
6	59	36.2	20	2	Q6UQN8	Q6UQN8 vidua macro
7	59	36.2	20	2	Q6UQN9	Q6UQN9 vidua wilso
8	59	36.2	20	2	Q6UQP0	Q6UQP0 vidua camer
9	59	36.2	20	2	Q6UQP2	Q6UQP2 vidua rari
10	59	36.2	20	2	Q6UQP3	Q6UQP3 vidua purpu
11	59	36.2	20	2	Q6UQP4	Q6UQP4 vidua regia
12	59	36.2	20	2	Q6UQP5	Q6UQP5 vidua fisch
13	59	36.2	20	2	AAR12840	AAR12840 vidua fis
14	59	36.2	20	2	AAR12841	AAR12841 vidua reg
15	59	36.2	20	2	AAR12842	AAR12842 vidua pur
16	59	36.2	20	2	AAR12843	AAR12843 vidua rar
17	59	36.2	20	2	AAR12844	AAR12844 vidua rar
18	59	36.2	20	2	AAR12845	AAR12845 vidua cam
19	59	36.2	20	2	AAR12846	AAR12846 vidua wil
20	59	36.2	20	2	AAR12847	AAR12847 vidua mac
21	59	36.2	20	2	AAR12848	AAR12848 vidua mac
22	59	36.2	20	2	AAR12849	AAR12849 vidua hyp
23	59	36.2	20	2	AAR12850	AAR12850 vidua obt
24	59	36.2	20	2	AAR12851	AAR12851 vidua par
25	59	36.2	20	2	AAR12852	AAR12852 vidua ori
26	59	36.2	20	2	AAR12853	AAR12853 anomalosp
27	34	20.9	18	2	Q6XPU2	Q6XPU2 vitis vinif
28	34	20.9	18	2	AAO91765	AAO91765 vitis vin
29	33	20.2	19	1	CXAD CONGE	P60274 conus geogr
30	33	20.2	22	2	Q71KS7	Q71KS7 conus stria
31	33	20.2	22	2	AAQ05878	AAQ05878 conus str

32 33 20.2 24 1 PIBG CANFA
33 33 20.2 29 2 Q76BR7
34 33 20.2 29 2 BAC98367
35 32 19.6 29 2 Q6VLX0
36 32 19.6 29 2 AAR11219
37 32 19.6 29 2 AAR24093
38 31 19.0 28 2 O42558
39 30 18.4 24 1 PLI3_PLETR
40 30 18.4 24 2 Q788Q0
41 30 18.4 26 2 Q78189
42 30 18.4 29 2 Q6QVJ7
43 30 18.4 29 2 AAS18499
44 29 17.8 17 2 Q7M0H0
45 29 17.8 18 1 CXA1_CONER

P12800 canis famil
Q76br7 homo sapien
Bac98367 homo sapi
Q6vix0 bos taurus
Aar11219 bos tauru
Aar24093 bos tauru
O42558 brachydanio
P36987 plectreaurys
Q788q0 xenopus lae
Q7ri89 plasmodium
Q6qvj7 phaseolus v
Aas18499 phaseolus
Q7m0h0 mus sp. cd3
P50982 conus ermin

ALIGNMENTS

RESULT 1

Q6UQN2 PRELIMINARY; PRT; 20 AA.
ID Q6UQN2
AC Q6UQN2;
DT 05-JUL-2004 (Tremblrel. 27, Created)
DT 05-JUL-2004 (Tremblrel. 27, Last sequence update)
DT 05-JUL-2004 (Tremblrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment).
OS Anomalospiza imberbis.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Passeridae;
OC Anomalospiza;
OX NCBI_TaxID=187417;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363845; AAR12853.1; -.
FT NON_TER 1 1
FT TER 20 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match 36.2%; Score 59; DB 2; Length 20;

Best Local Similarity 100.0%; Pred. No. 0.19;

Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNV 11

|||||

Db 10 ALDAAYCFRNV 20

RESULT 2

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ID Q6UQN3
AC Q6UQN3;
DT 05-JUL-2004 (Tremblrel. 27, Created)
DT 05-JUL-2004 (Tremblrel. 27, Last sequence update)
DT 05-JUL-2004 (Tremblrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment).
OS Vidua orientalis aucupum.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrildidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=247989;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363844; AAR12852.1; -.
FT NON_TER 1 1
FT TER 20 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

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Query Match          36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNV 11
Db 10 ALDAAYCFRNV 20

RESULT 3
Q6UQN4 ID Q6UQN4 PRELIMINARY; PRT; 20 AA.
AC Q6UQN4;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment)
OS Vidua paradisaea (paradisae whydah)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrilidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=37614;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363843; AAR12851.1; -.
FT NON_TER 1
FT NON_TER 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match          36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNV 11
Db 10 ALDAAYCFRNV 20

RESULT 4
Q6UQN5 ID Q6UQN5 PRELIMINARY; PRT; 20 AA.
AC Q6UQN5;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment)
OS Vidua obtusa (broad-tailed paradise-whydah)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrilidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=247663;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363842; AAR12850.1; -.
FT NON_TER 1
FT NON_TER 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match          36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNV 11
Db 10 ALDAAYCFRNV 20

RESULT 5
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AC Q6UQN6;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment)
OS Vidua hypocherina.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrilidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=187450;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363841; AAR12849.1; -.
FT NON_TER 1
FT NON_TER 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match          36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNV 11
Db 10 ALDAAYCFRNV 20

RESULT 6
Q6UQN8 ID Q6UQN8 PRELIMINARY; PRT; 20 AA.
AC Q6UQN8;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment)
OS Vidua macroura.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrilidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=187451;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363839; AAR12847.1; -.
FT NON_TER 1
FT NON_TER 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match          36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNV 11
Db 10 ALDAAYCFRNV 20

RESULT 7
Q6UQN9 ID Q6UQN9 PRELIMINARY; PRT; 20 AA.
AC Q6UQN9;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)

```

```

DE Transforming growth factor-beta 2 (Fragment).
OS Vidua wilsoni (pale-winged indigobird).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrilidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=243222;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363838; AAR12846.1; -.
FT NON_TER 1
FT NON_TER 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match 36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNV 11
DB 10 ALDAAAYCFRNV 20

RESULT 8
Q6UQP0 PRELIMINARY; PRT; 20 AA.
AC Q6UQP0;
DT 05-JUL-2004 (TREMBLrel. 27, Created)
DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment).
OS Vidua camerunensis (Cameroun indigobird).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrilidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=243226;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363837; AAR12845.1; -.
FT NON_TER 1
FT NON_TER 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match 36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNV 11
DB 10 ALDAAAYCFRNV 20

RESULT 9
Q6UQP2 PRELIMINARY; PRT; 20 AA.
AC Q6UQP2;
DT 05-JUL-2004 (TREMBLrel. 27, Created)
DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment).
OS Vidua rariocla (Jambandu indigobird).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrilidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=243221;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;

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RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363835; AAR12843.1; -.
DR EMBL; AY363836; AAR12844.1; -.
FT NON_TER 1
FT NON_TER 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match 36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNV 11
DB 10 ALDAAAYCFRNV 20

RESULT 10
Q6UQP3 PRELIMINARY; PRT; 20 AA.
AC Q6UQP3;
DT 05-JUL-2004 (TREMBLrel. 27, Created)
DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment).
OS Vidua purpurascens (dusky indigobird).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrilidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=243220;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363834; AAR12842.1; -.
FT NON_TER 1
FT NON_TER 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match 36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNV 11
DB 10 ALDAAAYCFRNV 20

RESULT 11
Q6UQP4 PRELIMINARY; PRT; 20 AA.
AC Q6UQP4;
DT 05-JUL-2004 (TREMBLrel. 27, Created)
DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment).
OS Vidua regia (queen whydah).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrilidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=243224;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363833; AAR12841.1; -.
FT NON_TER 1
FT NON_TER 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match 36.2%; Score 59; DB 2; Length 20;

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Best Local Similarity 100.0%; Pred. No. 0.19; Mismatches 0; Indels 0; Gaps 0;
Matches 11; Conservative 0

Qy 1 ALDAAYCFRNV 11
Db 10 ALDAAYCFRNV 20

RESULT 12

Q6UQPS PRELIMINARY; PRT; 20 AA.
AC Q6UQPS;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment).
OS Vidua fischeri (straw-tailed whydah).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrildidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=243223;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363832; AAR12840.1; -.
FT NON TER 1 1
FT NON TER 20 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match 36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNV 11
Db 10 ALDAAYCFRNV 20

RESULT 13

AAR12840 PRELIMINARY; PRT; 20 AA.
ID AAR12840;
AC AAR12840;
DT 02-MAR-2004 (TrEMBLrel. 27, Created)
DT 02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment).
OS Vidua fischeri (straw-tailed whydah).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrildidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=243223;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363832; AAR12840.1; -.
FT NON TER 1 1
FT NON TER 20 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match 36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNV 11
Db 10 ALDAAYCFRNV 20

RESULT 14

AAR12841 PRELIMINARY; PRT; 20 AA.
ID AAR12841;
AC AAR12841;
DT 02-MAR-2004 (TrEMBLrel. 27, Created)
DT 02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment).
OS Vidua regia (queen whydah).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrildidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=243224;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363833; AAR12841.1; -.
FT NON TER 1 1
FT NON TER 20 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match 36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNV 11
Db 10 ALDAAYCFRNV 20

RESULT 15

AAR12842 PRELIMINARY; PRT; 20 AA.
ID AAR12842;
AC AAR12842;
DT 02-MAR-2004 (TrEMBLrel. 27, Created)
DT 02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
DE Transforming growth factor-beta 2 (Fragment).
OS Vidua purpurascens (dusky indigobird).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Passeriformes; Estrildidae; Viduinae;
OC Vidua.
OX NCBI_TaxID=243220;
RN [1]
RP SEQUENCE FROM N.A.
RA Sorenson M.D., Balakrishnan C.N., Payne R.B.;
RT "Clade-limited colonization in brood parasitic finches (Vidua spp.).";
RL Syst. Biol. 0:0-0(2003).
DR EMBL; AY363834; AAR12842.1; -.
FT NON TER 1 1
FT NON TER 20 20
SQ SEQUENCE 20 AA; 2408 MW; 7743E991CC24BD00 CRC64;

Query Match 36.2%; Score 59; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.19; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNV 11
Db 10 ALDAAYCFRNV 20

Search completed: October 29, 2004, 08:40:39
Job time : 60 secs

GenCore version 5.1.1.6
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OM protein - protein search, using sw model

Run on: October 29, 2004, 08:30:34 ; Search time 152 Seconds
(without alignments)
68.442 Million cell updates/sec

Title: US-09-822-873-1

Perfect score: 163

Sequence: 1 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 200273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 768619

Minimum DB seq length: 0

Maximum DB seq length: 29

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

1: Geneseqp1980s:*

2: Geneseqp1990s:*

3: Geneseqp2000s:*

4: Geneseqp2001s:*

5: Geneseqp2002s:*

6: Geneseqp2003as:*

7: Geneseqp2003bs:*

8: Geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	163	100.0	29	4	AAG78516 Immunosti
2	150	92.0	27	1	AAP60241 Cartilage
3	121	74.2	21	7	ADC21250 Transform
4	121	74.2	21	7	ADC71237 N-termina
5	102	62.6	29	1	AAP40004 Partial s
6	101	62.0	27	1	AAP60242 Cartilage
7	99	60.7	19	1	AAP95344 N-termina
8	98	60.1	21	7	ADC21251 Transform
9	98	60.1	21	7	ADC71238 N-termina
10	92	56.4	21	7	ADC21252 N-termina
11	92	56.4	21	7	ADC71239 N-termina
12	78	47.9	16	2	AAR08297 TGF-beta
13	78	47.9	16	4	AAG78517 Immunosti
14	78	47.9	28	2	AAW24700 Finger 1
15	75	46.0	17	7	ADC21248 Human TGI
16	75	46.0	17	7	ADC71240 Chromatog
17	75	46.0	21	7	ADC21249 Transform
18	69	42.3	29	1	AAP71611 Fragment
19	68	41.7	21	7	ADC71236 N-termina
20	68	41.7	28	2	AAW24703 Finger 1
21	64	39.3	14	3	AAAY92958 Transform
22	63	38.7	28	2	AAW24706 Finger 1
23	61	37.4	28	2	AAW24697 Finger 1
24	61	37.4	28	2	AAW24709 Finger 1
25	58	35.6	12	2	AAW86710 Synthetic

26	57	35.0	16	2	AAR08296 TGF-beta
27	57	35.0	16	4	AAG78522 Immunosti
28	56	34.4	12	2	AAW86721 Synthetic
29	54	33.1	12	2	AAW86711 Synthetic
30	52	31.9	16	2	AAR08295 TGF-beta
31	52	31.9	16	4	AAG78521 Immunosti
32	51	31.3	12	2	AAW86722 Synthetic
33	51	31.3	12	2	AAW86709 Synthetic
34	51	31.3	12	2	AAW86724 Synthetic
35	49	30.1	9	5	AAR08295 BP protei
36	49	30.1	9	5	AAU82694 BP protei
37	47	28.8	12	2	AAW86712 Synthetic
38	47	28.8	13	3	AAW86712 Human che
39	47	28.8	14	3	AAAY92959 Transform
40	46	28.2	12	2	AAW86707 Synthetic
41	46	28.2	12	2	AAW86723 Synthetic
42	46	28.2	13	2	AAAY14247 Chemokine
43	46	28.2	13	3	AAW15847 Chemokine
44	46	28.2	13	3	AAW18402 Chemokine
45	46	28.2	14	3	AAAY92957 Transform

ALIGNMENTS

RESULT 1

AAAG78516
ID AAG78516 standard; peptide; 29 AA.

XX AC AAG78516;

XX DT 22-JAN-2002 (first entry)

XX DE Immunostimulating N-terminal TGF-beta fragment.

XX KW TGF-beta; Transforming growth factor-beta; Immunostimulating; Vaccine;

XX KW Antibody; Cytokine; Immunise.

XX OS Homo sapiens.

XX PN WO200172331-A1.

XX PD 04-OCT-2001.

XX PF 30-MAR-2001; 2001WO-DK000218.

XX PR 31-MAR-2000; 2000DK-00000540.

XX PR 13-NOV-2000; 2000US-0246973P.

XX (VACC-) VACCINE CHIP TECHNOLOGY APS.

XX Kaastrup P;

XX WPI; 2001-639205/73.

A composition containing a fragment of transforming growth factor-beta with an immunogenic determinant provides increased immunogenicity of the determinant and is useful as a vaccine.

Claim 2; Page 68; 88pp; English.

The invention relates to an immunogenic composition comprising a fragment of transforming growth factor-beta (TGF-beta) capable of eliciting an immunostimulating effect, and an immunogenic determinant against which the immunogenic response is required. It is believed that when an individual is immunised with a composition comprising the TGF-beta fragment of the invention, antibodies against the fragment are generated. Following immunisation, these antibodies may also bind to naturally occurring immunosuppressing cytokines of the immunised individual. This may then result in the blocking and/or reduction of the effect of the inhibitory effect of naturally occurring cytokines on the immune system. The TGF-beta fragments of the invention have immunostimulant activity, and as a result may be of use in the manufacture of a medicament for enhancing the

CC immunostimulating effects of an immunisation. The current sequence
 CC represents the immunostimulating N-terminal TGF-beta fragment
 XX
 SQ Sequence 29 AA;

Query Match 100.0%; Score 163; DB 4; Length 29;
 Best Local Similarity 100.0%; Pred. No. 8e-15; 0; Indels 0; Gaps 0;
 Matches 29; Conservative 0; Mismatches 0;

Qy 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
 |||||
 Db 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
 |||||

RESULT 2

RAP60241
 ID AAP60241 standard; peptide; 27 AA.

XX AC AAP60241;

XX XX 25-MAR-2003 (revised)
 DT 24-MAY-1991 (first entry)

XX XX Cartilage-inducing factor A.

XX XX Cartilage-inducing factor A; implant; chondrogenesis; osteogenesis.

XX OS Bos taurus.

XX XX EPI69016-A.

XX XX 22-JAN-1986.

XX XX 08-JUL-1985; 85EP-00304848.

XX PR 16-JUL-1984; 84US-00630938.

XX PR 26-FEB-1985; 85US-00705479.

XX PR 19-AUG-1985; 85US-00767144.

XX PR 10-DEC-1987; 87US-00130884.

XX PR 08-JUN-1988; 88US-00204173.

XX XX (CLGE) COLLAGEN CORP.

PA (CELT-) CELTRIX LABORATORIES INC.

PA (CELT-) CELTRIX PHARMACEUTICALS INC.

XX PI Seyedin S, Thomas T;

XX XX WPI; 1986-022692/04.

XX XX New cartilage-inducing polypeptide(s) - derived from bone, useful in
 PT implant comps.

XX PS Disclosure; Page 16; 27pp; English.

XX CC Cartilage-inducing factor A is found in mammalian bone, is a co-factor
 CC for inducing cartilage form., has activity in the TGF-beta assay, and is
 CC a dimer with mol. wt. ca. 26,000 (SDS-PAGE). It is useful as a component
 CC for implant comps. for inducing chondrogenesis and osteo- genesis, or
 CC for promoting connective tissue deposition (Updated on 25-MAR-2003 to
 CC correct PA field.)
 XX

SQ Sequence 27 AA;

Query Match 92.0%; Score 150; DB 1; Length 27;
 Best Local Similarity 96.3%; Pred. No. 4.3e-13;
 Matches 26; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVDNCCLRPLYIDFKRD 27
 |||||
 Db 1 ALDAAYCFRNVDNCCLRPLYIDFKRD 27
 |||||

RESULT 3

ADC21250
 ID ADC21250 standard; peptide; 21 AA.

XX AC ADC21250;

XX XX 18-DEC-2003 (first entry)

DE Transforming growth factor beta2 (TGFbeta2) N-terminal peptide.

XX KW Wound healing; burns treatment; TGI; tumour growth inhibitor;
 KW epithelial cell; human; vulnery; transforming growth factor beta2;
 KW TGFbeta2.

XX OS Homo sapiens.

XX XX US6559123-B1.

XX PD 06-MAY-2003.

XX XX 22-AUG-1994; 94US-00294061.

XX PR 19-APR-1985; 85US-00725003.

XX PR 07-APR-1986; 86US-00847931.

XX PR 20-OCT-1987; 87US-00111022.

XX PR 30-SEP-1991; 91US-00768100.

XX PR 04-NOV-1993; 93US-00147904.

XX PR 27-JAN-1994; 94US-00188197.

XX XX (OSIP-) OSI PHARM INC.

XX PI Iwata KK, Stephenson JR, Gold LI;

XX XX WPI; 2003-729670/69.

XX PT Treating a wound or burn in a mammal comprises administering a
 PT homogenous composition comprising a polypeptide prepared by using an
 PT acidified ethanol extract of human umbilical cord.

XX PS Disclosure; Fig 15; 86pp; English.

XX CC The present invention relates to a method for treating a wound or burn in
 CC a mammal. The method comprises administering a homogenous composition
 CC comprising a polypeptide known as TGI (tumour growth inhibitor) having a
 CC molecular weight of 25/26kDa to the mammal, prepared by subjecting an
 CC acidified ethanol extract of human umbilical cord to hydrophobic
 CC interaction chromatography and reverse phase high pressure liquid
 CC chromatography to produce fractions. The homogenous composition is useful
 CC for treating wounds and burns in a mammal. The composition inhibits the
 CC growth of milk lung cell line and also inhibits the growth of epithelial
 CC cells. The present sequence representing the N-terminal peptide of
 CC transforming growth factor beta2 (TGFbeta2) shows homology to TGI.

XX SQ Sequence 21 AA;

Query Match 74.2%; Score 121; DB 7; Length 21;
 Best Local Similarity 100.0%; Pred. No. 2.8e-09;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVDNCCLRPLY 21
 |||||
 Db 1 ALDAAYCFRNVDNCCLRPLY 21
 |||||

RESULT 4

ADC71237
 ID ADC71237 standard; peptide; 21 AA.

XX AC ADC71237;

XX XX 18-DEC-2003 (first entry)

DE N-terminal transforming growth factor beta 2 peptide.

XX

KW TGF-beta2; transforming growth factor beta 2; tumour growth inhibitor;
 KW TGI; TGI-1; TGI-2; TGI-beta3; wound healing; burn; cytostatic.
 XX Unidentified.
 XX US5586394-B1.
 PN 01-JUL-2003.
 XX
 PD 27-JAN-1994; 94US-00188197.
 XX
 PF 19-APR-1985; 85US-00725003.
 XX
 PR 07-APR-1986; 86US-00847931.
 XX
 PR 20-OCT-1986; 86US-00922121.
 XX
 PR 20-OCT-1987; 87US-00111022.
 XX
 PR 30-SEP-1991; 91US-00768100.
 XX
 PR 04-NOV-1993; 93US-00147904.
 XX
 XX (OSIP-) OSI PHARM INC.
 PA Iwata KK, Stephenson JR, Goid LI;
 PI WPI; 2003-719694/68.
 XX
 DR New homogeneous polypeptide composition, useful for inhibiting growth of
 PT a mink lung cell line, for treating burn or for promoting wound healing.
 XX
 PS Disclosure; Fig 15; 72pp; English.
 XX
 XX This invention relates to a novel chromatographically recovered
 CC polypeptide identified as tissue derived tumour growth inhibitor (TGI),
 CC also known as TGI-1, TGI-2 and TGI-beta3. Specifically, the inhibitory
 CC activity can be used against human tumour cells and an established mink
 CC lung cell line (CCL64), while stimulating the growth of normal human
 CC foreskin fibroblasts. As such, the present invention describes
 CC pharmaceutical compositions consisting of the cytostatic TGI peptide,
 CC which can be used to inhibit the growth of epithelial cells, promote
 CC wound healing or for treatment of burns. This peptide sequence is the N-
 CC terminal peptide region of the TGF-beta2 (transforming growth factor beta
 CC 2), which is homologous to the TGI peptide of the invention.
 XX
 SQ Sequence 21 AA;
 Query Match 74.2%; Score 121; DB 7; Length 21;
 Best Local Similarity 100.0%; Pred. No. 2.8e-09;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ALDAAFCFRNVQDNCCLRPY 21
 Db 1 ALDAAFCFRNVQDNCCLRPY 21
 RESULT 5
 AAP40004
 ID AAP40004 standard; protein; 29 AA.
 AC AAP40004;
 XX
 XX 25-MAR-2003 (revised)
 DT 30-NOV-1991 (first entry)
 DE Partial sequence of beta-type transforming growth factor.
 XX Beta-type transforming growth factor; platelet; placenta.
 KW Homo sapiens.
 OS
 XX
 XX EP128849-A.
 PN
 XX
 XX 19-DEC-1984.
 PD
 XX
 PF 04-JUN-1984; 84EP-00450016.
 XX

PR 03-JUN-1983; 83US-00500832.
 PR 03-JUN-1983; 83US-00500927.
 XX
 XX (USDC) US SEC OF COMMERCE.
 PA
 XX
 XX Frolik CA, Assolan RK, Sporn MB, Roberts AB;
 PI WPI; 1984-314215/51.
 DR
 XX
 XX Purified beta-type trans-forming growth factors - prepd. from human blood
 PT platelets and human placenta.
 PT
 XX
 XX Disclosure; Page 26; 32pp; English.
 XX
 XX The peptide is a partial sequence of beta-type transforming growth factor
 CC (bTGF) isolated from human placenta. C-S-carboxymethylcysteine and
 CC X-undetermined. bTGF is different from platelet-derived growth factor and
 CC has a mol. wt. of 25,000. Unlike most growth factors, it does not exert
 CC its growth promoting property by direct stimulation of total DNA
 CC synthesis. bTGF from human placenta does not compete with epidermal
 CC growth factor for membrane receptor sites, but is does require EGF
 CC induction of anchorage-independent growth of indicator cells. bTGF may
 CC play a unique role in physiological and pathological processes where
 CC platelet-derived factors modulate cell proliferation, since it has strong
 CC growth promoting activity but is not a strong mitogen. (Updated on 25-MAR
 CC -2003 to correct PA field.) (Updated on 25-MAR-2003 to correct PI field.)
 XX
 SQ Sequence 29 AA;
 Query Match 62.6%; Score 102; DB 1; Length 29;
 Best Local Similarity 58.6%; Pred. No. 1.4e-06;
 Matches 17; Conservative 4; Mismatches 8; Indels 0; Gaps 0;
 QY 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
 Db 1 ALDNTVCFSSTEKNCVQYIDFKRDLG 29
 RESULT 6
 AAP60242
 ID AAP60242 standard; protein; 27 AA.
 XX
 XX AAP60242;
 XX
 XX 25-MAR-2003 (revised)
 DT 24-MAY-1991 (first entry)
 XX
 XX Cartilage-inducing factor B.
 XX
 XX Cartilage-inducing factor B; implant; chondrogenesis; osteogenesis.
 KW Bos taurus.
 XX
 XX EP169016-A.
 PN
 XX
 XX 22-JAN-1986.
 PD
 XX
 XX 08-JUL-1985; 85EP-00304848.
 PF
 XX
 XX 16-JUL-1984; 84US-00630938.
 PR
 XX 26-FEB-1985; 85US-00705479.
 PR
 XX 19-AUG-1985; 85US-00767144.
 PR
 XX 10-DEC-1987; 87US-00130884.
 PR
 XX 08-JUN-1988; 88US-00204173.
 XX
 XX (CLGE) COLLAGEN CORP.
 PA (CELT-) CELTRIX LABORATORIES INC.
 PA (CELT-) CELTRIX PHARMACEUTICALS INC.
 XX
 XX Seyedin S, Thomas T;
 PI
 XX
 XX WPI; 1986-022692/04.
 DR
 XX


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XX AC ADC71238;
XX DT 18-DEC-2003 (first entry)
XX DE N-terminal transforming growth factor beta 3 peptide.
XX KW TGF-beta3; transforming growth factor beta 3; tumour growth inhibitor;
XX KW TGI; TGI-1; TGI-2; TGI-beta3; wound healing; burn; cytostatic.
XX OS Unidentified.
XX FN US6586394-B1.
XX PD 01-JUL-2003.
XX PF 27-JAN-1994; 94US-00188197.
XX PR 19-APR-1985; 85US-00725003.
XX PR 07-APR-1986; 86US-00847931.
XX PR 20-OCT-1986; 86US-00922121.
XX PR 20-OCT-1987; 87US-00111022.
XX PR 30-SEP-1991; 91US-00768100.
XX PR 04-NOV-1993; 93US-00147904.
XX PA (OSIP-) OSI PHARM INC.
XX PI Iwata KK, Stephenson JR, Gold LI;
XX WI; 2003-719694/68.
XX PT New homogeneous polypeptide composition, useful for inhibiting growth of
XX PT a mink lung cell line, for treating burn or for promoting wound healing.
XX PS Disclosure; Fig 15; 72pp; English.
XX CC This invention relates to a novel chromatographically recovered
XX CC polypeptide identified as tissue derived tumour growth inhibitor (TGI),
XX CC also known as TGI-1, TGI-2 and TGI-beta3. Specifically, the inhibitory
XX CC activity can be used against human tumour cells and an established mink
XX CC lung cell line (CCU64), while stimulating the growth of normal human
XX CC foreshin fibroblasts. As such, the present invention describes
XX CC pharmaceutical compositions consisting of the cytostatic TGI peptide,
XX CC which can be used to inhibit the growth of epithelial cells, promote
XX CC wound healing or for treatment of burns. This peptide sequence is the N-
XX CC terminal peptide region of the TGF-beta3 (transforming growth factor beta
XX CC 3), which is homologous to the TGI peptide of the invention.
XX SQ Sequence 21 AA;
    Query Match 60.1%; Score 98; DB 7; Length 21;
    Best Local Similarity 71.4%; Pred. No. 3.6e-06;
    Matches 15; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 1 ALDAAVCFRNVDNCCLRPLY 21
    ||| |||||:|:|:|
Db 1 ALDNTYCFRNLENCVVRPLY 21
    ||| |||||:|:|:|
RESULT 10
ADC21252
ID ADC21252 standard; peptide; 21 AA.
XX AC ADC21252;
XX DT 18-DEC-2003 (first entry)
XX DE N-terminal peptide of tumour growth inhibitor (TGI).
XX KW Wound healing; burns treatment; TGI; tumour growth inhibitor;
XX KW epithelial cell; human; vulnerary.
XX OS Homo sapiens.

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XX PH Key
XX FT Misc-difference 18
XX FT /label= Unknown
XX FN US6559123-B1.
XX PD 06-MAY-2003.
XX PF 22-AUG-1994; 94US-00294061.
XX PR 19-APR-1985; 85US-00725003.
XX PR 07-APR-1986; 86US-00847931.
XX PR 20-OCT-1987; 87US-00111022.
XX PR 30-SEP-1991; 91US-00768100.
XX PR 04-NOV-1993; 93US-00147904.
XX PR 27-JAN-1994; 94US-00188197.
XX PA (OSIP-) OSI PHARM INC.
XX PI Iwata KK, Stephenson JR, Gold LI;
XX WI; 2003-729670/69.
XX PT Treating a wound or burn in a mammal comprises administering a
XX PT homogeneous composition comprising a polypeptide prepared by using an
XX PT acidified ethanol extract of human umbilical cord.
XX PS Disclosure; Fig 15; 86pp; English.
XX CC The present invention relates to a method for treating a wound or burn in
XX CC a mammal. The method comprises administering a homogeneous composition
XX CC comprising a polypeptide known as TGI (tumour growth inhibitor) having a
XX CC molecular weight of 25/26kDa to the mammal, prepared by subjecting an
XX CC acidified ethanol extract of human umbilical cord to hydrophobic
XX CC interaction chromatography and reverse phase high pressure liquid
XX CC chromatography to produce fractions. The homogeneous composition is useful
XX CC for treating wounds and burns in a mammal. The composition inhibits the
XX CC growth of mink lung cell line and also inhibits the growth of epithelial
XX CC cells. The present sequence represents the N-terminal peptide of human
XX CC TGI.
XX SQ Sequence 21 AA;
    Query Match 56.4%; Score 92; DB 7; Length 21;
    Best Local Similarity 66.7%; Pred. No. 2.3e-05;
    Matches 14; Conservative 4; Mismatches 3; Indels 0; Gaps 0;
QY 1 ALDAAVCFRNVDNCCLRPLY 21
    ||| |||||:|:|:|
Db 1 ALDNTYCFRNLENCVVRPLY 21
    ||| |||||:|:|:|
RESULT 11
ADC71239
ID ADC71239 standard; peptide; 21 AA.
XX AC ADC71239;
XX DT 18-DEC-2003 (first entry)
XX DE N-terminal tissue derived tumour growth inhibitor (TGI) peptide.
XX KW tumour growth inhibitor; TGI; TGI-1; TGI-2; TGI-beta3; wound healing;
XX KW burn; cytostatic.
XX OS Unidentified.
XX PH Key
XX FT Misc-difference 18
XX FT /label= Xaa
XX FT /note= "Xaa= unknown"
XX FT

```

PN US6586394-B1.
 XX
 PD
 XX
 PF
 XX
 PP
 XX
 PS
 XX
 PT
 XX
 QY 27-JAN-1994; 94US-00188197.
 XX
 PR 19-APR-1985; 85US-00725003.
 PR 07-APR-1986; 86US-00847931.
 PR 20-OCT-1986; 86US-00922121.
 PR 20-OCT-1987; 87US-00111022.
 PR 30-SEP-1991; 91US-00768100.
 PR 04-NOV-1993; 93US-00147904.
 XX
 PA (OSIP-) OSI PHARM INC.
 XX
 PI Iwata KK, Stephenson JR, Gold LI;
 XX
 DR WPI; 2003-719694/68.
 XX
 PT New homogeneous polypeptide composition, useful for inhibiting growth of
 PT a mink lung cell line, for treating burn or for promoting wound healing.
 XX
 PS Disclosure; Fig 15; 72pp; English.
 XX
 CC This invention relates to a novel chromatographically recovered
 CC polypeptide identified as tissue derived tumour growth inhibitor (TGI),
 CC also known as TGI-1, TGI-2 and TGI-beta3. Specifically, the inhibitory
 CC activity can be used against human tumour cells and an established mink
 CC lung cell line (CCL64), while stimulating the growth of normal human
 CC foreskin fibroblasts. As such, the present invention describes
 CC pharmaceutical compositions consisting of the cytostatic TGI peptide,
 CC which can be used to inhibit the growth of epithelial cells, promote
 CC wound healing or for treatment of burns. This peptide sequence is the N-
 CC terminal peptide region of the tissue derived tumour growth inhibitor
 CC (TGI) of the invention.
 XX
 SQ Sequence 21 AA;
 Query Match 56.4%; Score 92; DB 7; Length 21;
 Best Local Similarity 66.7%; Pred. No. 2.3e-05;
 Matches 14; Conservative 4; Mismatches 3; Indels 0; Gaps 0;
 QY 1 ALDAAYCFRNQDNCCLRPY 21
 DB 1 ALDTNYCFRNLENCVXPY 21
 RESULT 12
 AAR08297
 ID AAR08297 standard; protein; 16 AA.
 XX
 AC AAR08297;
 XX
 DT 09-JAN-2003 (revised)
 DT 04-MAR-1991 (first entry)
 XX
 DE TGF-beta based peptide (III) as immunosuppressive.
 XX
 KW TGF-beta; organ resection; septic shock; autoimmune disease;
 KW rheumatoid arthritis.
 XX
 OS Homo sapiens.
 XX
 PN WC9014359-A.
 XX
 PD 29-NOV-1990.
 XX
 PF 25-MAY-1989; 89US-00356964.
 XX
 PR 25-MAY-1989; 89US-00356964.
 XX
 PA (GETH) GENENTECH INC.
 XX

PI Burnier JA;
 XX
 DR WPI; 1990-375948/50.
 XX
 PT New polypeptide(s) and compans. based on TGF-beta - used for treatment of
 PT organ resection, septic shock, autoimmune disease, rheumatoid arthritis
 PT etc.
 XX
 PS Claim 12; Page 31; 47pp; English.
 XX
 CC The sequence is based on conserved sequences in the family of TGF-beta
 CC molecules. The polypeptide may be prepared by solid phase synthesis.
 CC fragment condensation or recombinant DNA technique and has TGF-beta-like
 CC activity. It can be used for treating immune or inflammatory disorders,
 CC e.g. allograft rejection, septic shock, adult respiratory disease
 CC syndrome, autoimmune disease rheumatoid arthritis, systemic lupus
 CC erythematosus or inflammatory bowel disease. They can also be used in
 CC wound healing and as immunogens to elicit antibodies. See also AAR08295-
 CC 97. (Updated on 09-JAN-2003 to add missing OS field.)
 XX
 SQ Sequence 16 AA;
 Query Match 47.9%; Score 78; DB 2; Length 16;
 Best Local Similarity 100.0%; Pred. No. 0.0014;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 16 CLRLYLIDFKRDIG 29
 DB 1 CLRLYLIDFKRDIG 14
 RESULT 13
 AAG78517
 ID AAG78517 standard; peptide; 16 AA.
 XX
 AC AAG78517;
 XX
 DT 22-JAN-2002 (first entry)
 XX
 DE Immunostimulating TGF-beta fragment 1.
 XX
 KW TGF-beta; Transforming growth factor-beta; Immunostimulating; Vaccine;
 KW Antibody; Cytokine; Immunise.
 XX
 OS Homo sapiens.
 XX
 PN WO200172331-A1.
 XX
 PD 04-OCT-2001.
 XX
 PF 30-MAR-2001; 2001WO-DK000218.
 XX
 PR 31-MAR-2000; 2000DK-00000540.
 PR 13-NOV-2000; 2000US-0246973P.
 XX
 PA (VACC-) VACCINE CHIP TECHNOLOGY APS.
 XX
 PI Kaastrup P;
 XX
 DR WPI; 2001-639205/73.
 XX
 PT A composition containing a fragment of transforming growth factor-beta
 PT with an immunogenic determinant provides increased immunogenicity of the
 PT determinant and is useful as a vaccine.
 XX
 PS Disclosure; Page 83; 88pp; English.
 XX
 CC The invention relates to an immunogenic composition comprising a fragment
 CC of transforming growth factor-beta (TGF-beta) capable of eliciting an
 CC immunostimulating effect, and an immunogenic determinant against which
 CC the immunogenic response is required. It is believed that when an
 CC individual is immunised with a composition comprising the TGF-beta
 CC fragment of the invention, antibodies against the fragment are generated.

App

CC Following immunisation, these antibodies may also bind to naturally
 CC occurring immunosuppressing cytokines of the immunised individual. This
 CC may then result in the blocking and/or reduction of the of the inhibitory
 CC effect of naturally occurring cytokines on the immune system. The TGF-
 CC beta fragments of the invention have immunostimulant activity, and as a
 CC result may be of use in the manufacture of a medicament for enhancing the
 CC immunostimulating effects of an immunisation. The current sequence
 CC represents the immunostimulating TGF-beta fragment 1
 XX
 XX Sequence 16 AA;

Query Match 47.9%; Score 78; DB 4; Length 16;
 Best Local Similarity 100.0%; Pred. No. 0.0014;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 16 CLRPLYIDFKRDLG 29
 |||||
 Db 1 CLRPLYIDFKRDLG 14

RESULT 14
 AAW24700
 ID AAW24700 standard; peptide; 28 AA.

XX AC AAW24700;

XX DT 02-OCT-1997 (first entry)

XX DE Finger 1 domain of TGF-beta2.

XX KW Finger 1; domain; transforming growth factor-beta1; TGF-beta1; agonist;
 KW biopolymer; F1; finger 2; F2; helix; ligand binding surface; mimic;
 KW TGF-beta superfamily; receptor; analogue; morphon; cell surface receptor;
 KW morphogenic cascade.

XX OS Homo sapiens.

XX PN WO9640771-A1.

XX PD 19-DEC-1996.

XX PF 06-JUN-1996; 96WO-US009293.

XX PR 07-JUN-1995; 95US-00478097.

XX PA (CREA-) CREATIVE BIOMOLECULES INC.

XX PI Keck PC, Smart JE;

XX PS WPI; 1997-087054/08.

XX PT Transforming growth factor (TGF)-beta single chain analogues - bind to
 PT natural TGF-beta receptors, esp. to activate a morphogenic cascade.

XX PS Claim 6; Page 71-72; 134pp; English.

XX This sequence represents the finger 1 domain of transforming growth
 CC factor (TGF)-beta2 which corresponds to residues 2-29. This peptide was
 CC used as part of a single chain synthetic amino acid biopolymer construct
 CC which contains a finger 1 (F1), a finger 2 (F2) and a heel (H) region
 CC together which are complementary to the ligand binding surface of a TGF-
 CC beta superfamily receptor, and an amino acid structure which mimics the
 CC structure of a member of the TGF-beta superfamily, such that the
 CC construct preferentially binds the receptor. The new single stranded TGF-
 CC beta superfamily analogues are designated morphons; they bind
 CC preferentially, either in vivo or in vitro, to a natural cell surface
 CC receptor for the TGF-beta superfamily member they are derived from. Upon
 CC binding to the receptor, the analogues can act as agonists or mimics of
 CC the parent TGF-beta superfamily member activity, pref. by activating a
 CC morphogenic cascade. The new TGF-beta family analogues are thought to
 CC have a lower molecular weight than the natural dimers and will therefore
 CC have a faster rate of diffusion. The morphons may be engineered to
 CC enhance their binding activity

XX SQ Sequence 28 AA;

Query Match 47.9%; Score 78; DB 2; Length 28;
 Best Local Similarity 100.0%; Pred. No. 0.0024;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 16 CLRPLYIDFKRDLG 29
 |||||
 Db 1 CLRPLYIDFKRDLG 14

RESULT 15
 ADC21248
 ID ADC21248 standard; peptide; 17 AA.

XX AC ADC21248;

XX DT 18-DEC-2003 (first entry)

XX DE Human TGI peptide useful for treating burns/wounds.

XX KW Wound healing; burns treatment; TGI; tumour growth inhibitor;
 KW epithelial cell; human; vulnerary.

XX OS Homo sapiens.

XX PN US6559123-B1.

XX PD 06-MAY-2003.

XX PF 22-AUG-1994; 94US-00294061.

XX PR 19-APR-1985; 85US-00725003.

XX PR 20-OCT-1987; 86US-00847931.

XX PR 30-SEP-1991; 91US-00768100.

XX PR 04-NOV-1993; 93US-00147904.

XX PR 27-JAN-1994; 94US-00188197.

XX PA (OSIP-) OSI PHARM INC.

XX PI Iwata KK, Stephenson JR, Gold LI;

XX PS WPI; 2003-729670/59.
 PT Treating a wound or burn in a mammal comprises administering a
 PT homogenous composition comprising a polypeptide prepared by using an
 PT acidified ethanol extract of human umbilical cord.

XX PS Disclosure; Col 2; 86pp; English.

XX The present invention relates to a method for treating a wound or burn in
 CC a mammal. The method comprises administering a homogenous composition
 CC comprising a polypeptide known as TGI (tumour growth inhibitor) having a
 CC molecular weight of 25/26kDa to the mammal, prepared by subjecting an
 CC acidified ethanol extract of human umbilical cord to hydrophobic
 CC interaction chromatography and reverse phase high pressure liquid
 CC chromatography to produce fractions. The homogenous composition is useful
 CC for treating wounds and burns in a mammal. The composition inhibits the
 CC growth of milk lung cell line and also inhibits the growth of epithelial
 CC cells. The present sequence represents a human TGI peptide useful for
 CC treating burns/wounds.

XX SQ Sequence 17 AA;

Query Match 46.0%; Score 75; DB 7; Length 17;
 Best Local Similarity 64.7%; Pred. No. 0.0038;
 Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1 ALDAAVCFRNVDNCL 17
 |||||
 Db 1 ALDNYCFRNLENCV 17

Search completed: October 29, 2004, 08:39:35
Job time : 154 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 29, 2004, 08:31:29 ; Search time 37 Seconds
(without alignments)

75.413 Million cell updates/sec

Title: US-09-822-873-1

Perfect score: 163

Sequence: 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 5939

Minimum DB seq length: 0

Maximum DB seq length: 29

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

PIR 79:*

1: PIR1:*

2: PIR2:*

3: PIR3:*

4: PIR4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	43	26.4	19	A21182	4K prothoracicotropic hormone I - silkworm (fragment)
2	41	25.2	20	JT0410	bombyxin-IV chain A - silkworm
3	40	24.5	19	C21182	4K prothoracicotropic hormone I - silkworm
4	35.5	21.8	27	A58997	Kappa-conotoxin PV
5	34	20.9	16	PH1778	T cell receptor al
6	33.5	20.6	24	A37973	lutropin-choriogon
7	33	20.2	24	A5298	fibrinogen gamma c
8	30	18.4	24	E33613	plectoxin XIII - s
9	29	17.8	17	I53392	CP33 antigen homol
10	29	17.8	18	A58589	alpha-conotoxin EI
11	28.5	17.5	28	S41774	ubiquinol-cytochrome
12	28	17.2	26	B37119	acetyl-CoA carboxy
13	28	17.2	26	I57726	major outer membra
14	28	17.2	27	A56175	delta-conotoxin Tx
15	28	17.2	29	A43620	omega-conotoxin GV
16	28	17.2	29	B43620	omega-conotoxin GV
17	27.5	16.9	27	S19619	delta-conotoxin Tx
18	27	16.6	15	D48394	major fat-globule
19	27	16.6	17	A38824	tachyplesin I - ho
20	27	16.6	17	JU0125	tachyplesin III -
21	27	16.6	18	JU0125	polypheusin II -
22	27	16.6	19	JU0124	tachyplesin I prec
23	27	16.6	24	A05134	neurotoxin V - sco
24	26.5	16.3	29	A58537	omega-conotoxin MV
25	26	16.0	17	I49425	mitogen regulated
26	26	16.0	18	JU0124	polypheusin I - A
27	26	16.0	27	A14112	methane monooxygen
28	25.5	15.6	25	JH0701	omega-conotoxin MV
29	25.5	15.6	26	NTSR3L	neurotoxin III - E

30	25	15.3	10	2	PC2171	triacylglycerol li
31	25	15.3	10	2	I52645	Gene B-50 protein
32	25	15.3	11	2	S78765	ribosomal protein
33	25	15.3	15	2	PH1613	Ig H chain V-D-J r
34	25	15.3	17	2	A35550	adrenocortical cel
35	25	15.3	18	2	PQ0022	fixA protein - Rhi
36	25	15.3	21	2	H64640	hypothetical prote
37	25	15.3	24	2	A60606	rhodopsin - Califo
38	25	15.3	29	2	S01614	dystrophin - rat (
39	25	15.3	29	2	H89949	hypothetical prote
40	24.5	15.0	25	2	C35507	proteinase inhibit
41	24.5	15.0	25	2	JH0700	omega-conotoxin MV
42	24	14.7	11	2	S04875	nifS protein - Bra
43	24	14.7	13	2	PH1593	Ig H chain V-D-J r
44	24	14.7	16	2	A59046	alpha-conotoxin MI
45	24	14.7	16	2	A59045	alpha-conotoxin Au

ALIGNMENTS

RESULT 1

A21182 4K prothoracicotropic hormone I - silkworm (fragment)

C;Species: Bombyx mori (silkworm)

C;Date: 03-Aug-1990 #sequence_revision 03-Aug-1990 #text_change 09-Jul-2004

C;Accession: A21182

R;Nagasawa, H.; Kataoka, H.; Isogai, A.; Tamura, S.; Suzuki, A.; Ishizaki, H.; Mizoguchi, Science 226, 1344-1345, 1984

A;Title: Amino-terminal amino acid sequence of the silkworm prothoracicotropic hormone:

A;Reference number: A21182

A;Accession: A21182

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-19 <NAG>

A;Cross-references: UNIPROT:P26733

C;Superfamily: insulin

Query Match 26.4%; Score 43; DB 2; Length 19;

Best Local Similarity 53.8%; Pred. No. 11;

Matches 7; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

Qy 11 VQDNCCLRPLYID 23

Db 2 VDECCCFRPTCTLD 14

RESULT 2

JT0410 bombyxin-IV chain A - silkworm

C;Species: Bombyx mori (silkworm)

C;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 20-Mar-1998

C;Accession: JT0410

R;Maruyama, K.; Hietter, H.; Nagasawa, H.; Isogai, A.; Tamura, S.; Suzuki, A.; Ishizaki, Agric. Biol. Chem. 52, 3035-3041, 1988

A;Title: Isolation and primary structure of bombyxin-IV, a novel molecular species of b

A;Reference number: JT0410

A;Accession: JT0410

A;Molecule type: protein

A;Residues: 1-20 <MAR>

C;Superfamily: insulin

F;6-11/Disulfide bonds: #status predicted

F;7/Disulfide bonds: interchain (to chain B-10) #status predicted

F;20/Disulfide bonds: interchain (to chain B-22) #status predicted

Query Match 25.2%; Score 41; DB 2; Length 20;

Best Local Similarity 46.2%; Pred. No. 22;

Matches 6; Conservative 3; Mismatches 4; Indels 0; Gaps 0;

Qy 11 VQDNCCLRPLYID 23

Db 2 VDECCIQPCTLD 14

RESULT 3

C21182
4K prothoracicotropic hormone III - silkworm (fragment)
C:Species: Bombyx mori (silkworm)
C:Date: 03-Aug-1990 #sequence_revision 03-Aug-1990 #text_change 12-Apr-1995
C:Accession: C21182
R:Nagasawa, H.; Kataoka, H.; Isogai, A.; Tamura, S.; Suzuki, A.; Ishizaki, H.; Mizoguchi, S.
A:Title: Amino-terminal amino acid sequence of the silkworm prothoracicotropic hormone.
A:Reference number: A21182
A:Accession: C21182
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-19 <NAG>
C:Superfamily: insulin

Query Match 24.5%; Score 40; DB 2; Length 19;
Best Local Similarity 53.8%; Pred. No. 29;
Matches 7; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

QY 11 VQDNCCLRPLYID 23
| | | | |
DB 2 VVDECCLOPCTXD 14
| | | | |

RESULT 4

A58997
kappa-conotoxin PVIIA - cone shell (Conus purpurascens)
N:Alternate names: fin-popping peptide
C:Species: Conus purpurascens (purple cone)
C:Date: 23-Jul-1999 #sequence_revision 23-Jul-1999 #text_change 09-Jul-2004
C:Accession: A58997
R:Terlau, H.; Shon, K.J.; Grille, M.; Stocker, M.; Stuehmer, W.; Olivera, B.M.
A:Title: Strategy for rapid immobilization of prey by a fish-hunting marine snail.
A:Reference number: A58997
A:Accession: A58997
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-27 <TER>
A:Cross-references: UNIPROT:P56633
C:Comment: This conotoxin blocks conductance of the Shaker potassium channel.
C:Keywords: hydroxyproline; neurotoxin; venom
F:4/Modified site: 4-hydroxyproline (Pro) #status experimental

Query Match 21.8%; Score 35.5; DB 2; Length 27;
Best Local Similarity 50.0%; Pred. No. 1.8e+02;
Matches 6; Conservative 4; Mismatches 1; Indels 1; Gaps 1;

QY 7 CERNVDNCCLR 18
| | | | |
DB 8 CFQHL-DDCCSR 18
| | | | |

RESULT 5

PH1778
T cell receptor alpha chain V region (clone 1PBL V alpha 24-5) - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999
C:Accession: PH1778
R:Porcell, S.; Yockey, C.E.; Brenner, M.B.; Balk, S.P.
J. Exp. Med. 178, 1-16, 1993
A:Title: Analysis of T cell antigen receptor (TCR) expression by human peripheral blood

A:Reference number: PH1754; MUID:93301585; PMID:8391057
A:Accession: PH1778
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-16 <POR>

Query Match 20.9%; Score 34; DB 2; Length 16;
Best Local Similarity 45.5%; Pred. No. 1.8e+02;

Matches 5; Conservative 3; Mismatches 3; Indels 0; Gaps 0;
QY 15 CCLRPLYIDPK 25
| | | | |
DB 3 CWRPTFNDYK 13
| | | | |

RESULT 6

A37973
lutropin-choriogonadotropin receptor - rat (fragment)
N:Alternate names: luteinizing hormone-choriogonadotropin receptor
C:Species: Rattus norvegicus (Norway rat)
C:Date: 21-Jun-1991 #sequence_revision 21-Jun-1991 #text_change 23-Feb-1996
C:Accession: A37973
R:Tsay-Morris, C.H.; Buczko, E.; Wang, W.; Dufau, M.L.
J. Biol. Chem. 265, 19385-19388, 1990
A:Title: Intronic nature of the rat luteinizing hormone receptor gene defines a soluble
A:Reference number: A37973; MUID:91060531; PMID:2174034
A:Accession: A37973
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-24 <TSA>

Query Match 20.8%; Score 33.5; DB 2; Length 24;
Best Local Similarity 40.0%; Pred. No. 3.1e+02;
Matches 5; Conservative 4; Mismatches 5; Indels 3; Gaps 1;

QY 1 ALDAAYCFNVDNCCLRPL 20
| | | | |
DB 7 ALPAAHCLRLGLPNK---RPV 23
| | | | |

RESULT 7

A05298
fibrinogen gamma chain - dog (fragment)
C:Species: Canis lupus familiaris (dog)
C:Date: 05-Jun-1987 #sequence_revision 05-Jun-1987 #text_change 09-Jul-2004
C:Accession: A05298
R:Birken, S.; Wilner, G.D.; Canfield, R.E.
Thromb. Res. 7, 599-610, 1975
A:Title: Studies of the structure of canine fibrinogen.
A:Reference number: A94308; MUID:76081726; PMID:1198547
A:Accession: A05298
A:Molecule type: protein
A:Residues: 1-24 <BIR>
A:Cross-references: UNIPROT:P12800
C:Superfamily: fibrinogen gamma chain; fibrinogen beta/gamma homology
C:Keywords: blood coagulation; liver; plasma

Query Match 20.2%; Score 33; DB 2; Length 24;
Best Local Similarity 66.7%; Pred. No. 3.6e+02;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 12 QDNCCCL 17
| | | | |
DB 5 RDNCCI 10
| | | | |

RESULT 8

E53613
plectoxin XIII - spider (Plectreureys tristis)
C:Species: Plectreureys tristis
C:Date: 07-Jul-1995 #sequence_revision 07-Jul-1995 #text_change 09-Jul-2004
C:Accession: E53613
R:Quistad, G.B.; Skinner, W.S.
J. Biol. Chem. 269, 11098-11101, 1994
A:Title: Isolation and sequencing of insecticidal peptides from the primitive hunting sp

A:Reference number: A53613; MUID:94209277; PMID:8157635
A:Accession: E53613
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-24 <QUI>
A:Cross-references: UNIPROT:P36987

C:Superfamily: curtatoxin

Query Match 16.4%; Score 30; DB 2; Length 24;
Best Local Similarity 54.5%; Pred. No. 9.6e+02;
Matches 6; Conservative 1; Mismatches 2; Indels 1;

QY 6 YCFRNVDNCC 16
|||
DB 10 YCNGNVE--CC 18

RESULT 9

I53392
CD33 antigen homolog - mouse (fragment)

C:Species: Mus sp. (mouse)
C:Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 09-Jul-2004

C:Accession: I53392

R:Chies, J.A.; Lembezat, M.P.; Freitas, A.A.

Eur. J. Immunol. 24, 1657-1664, 1994

A:Title: Entry of B lymphocytes into the persistent cell pool in non-immunized mice is r

A:Reference number: I53392; MUID:94296870; PMID:8026526

A:Accession: I53392

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-17 <RES>

A:Cross-references: UNIPROT:Q7M0H0; GB:S71347; NID:G550035

C:Genetics:

A:Gene: Ig VHx24b

Query Match 17.8%; Score 29; DB 2; Length 17;
Best Local Similarity 57.1%; Pred. No. 9.8e+02;
Matches 4; Conservative 1; Mismatches 2; Indels 0;

QY 16 CLRPLYI 22
|||
DB 2 CARPYIV 8

RESULT 10

A58589
alpha-conotoxin EI - cone shell (Conus ermineus)

C:Species: Conus ermineus (ermine cone)

C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004

C:Accession: A58589

R:Martinez, J.S.; Olivera, B.M.; Gray, W.R.; Craig, A.G.; Groebe, D.R.; Abramson, S.N.;

Biochemistry 34, 14519-14526, 1995

A:Title: alpha-Conotoxin EI, a new nicotinic acetylcholine receptor antagonist with nove

A:Reference number: A58589; MUID:96062516; PMID:7578057

A:Accession: A58589

A:Molecule type: protein

A:Residues: 1-18 <WAK>

A:Cross-references: UNIPROT:P50982

A:Note: sequence confirmed by chemical synthesis

C:Comment: This alpha-conotoxin, as an acetylcholine receptor inhibitor, is a postsynap

C:Superfamily: alpha-conotoxin

C:Keywords: acetylcholine receptor inhibitor; amidated carboxyl end; hydroxyproline; pos

F:3/Modified site: 4-hydroxyproline (Pro) #status experimental

F:4-10,5-18/Disulfide bonds: #status experimental

F:18/Modified site: amidated carboxyl end (Cys) #status experimental

Query Match 17.8%; Score 29; DB 1; Length 18;

Best Local Similarity 50.0%; Pred. No. 1e+03;

Matches 4; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 12 QDNCCLRP 19

|||

DB 1 RDPCCYHP 8

RESULT 11

S41774

ubiquinol-cytochrome-c reductase (EC 1.10.2.2) cytochrome b - Trypanosoma congolense mib

C:Species: mitochondrion Trypanosoma congolense

C:Date: 25-Dec-1994 #sequence_revision 27-Feb-1997 #text_change 09-Jul-2004

C:Accession: S41774

R:Read, L.K.; Fish, W.R.; Murbiani, A.M.; Stuart, K.

Nucleic Acids Res. 21, 4073-4078, 1993

A:Title: Maxicircle DNA and edited mRNA sequences of closely related trypanosome species;

A:Reference number: S41774; MUID:93382785; PMID:8396763

A:Accession: S41774

A:Status: preliminary

A:Molecule type: mRNA

A:Residues: 1-28 <REA>

A:Cross-references: UNIPROT:Q7M2D7

C:Superfamily: cytochrome b; cytochrome b homology; cytochrome b6 homology; plastoquinone

C:Keywords: electron transfer; mitochondrion; oxidative phosphorylation; oxidoreductase

Query Match 17.5%; Score 28.5; DB 2; Length 28;

Best Local Similarity 60.0%; Pred. No. 1.8e+03;

Matches 6; Conservative 1; Mismatches 0; Indels 3; Gaps 1;

QY 8 FRNVQDNCC 17

|||

DB 13 FRNL---CCL 19

RESULT 12

B37119

acetyl-CoA carboxylase (EC 6.4.1.2) (clone lambdaDHN59) - rat (fragment)

C:Species: Rattus norvegicus (Norway rat)

C:Date: 08-Mar-1991 #sequence_revision 08-Mar-1991 #text_change 19-Mar-1999

C:Accession: B37119

R:Kong, I.S.; Lopez-Casillas, F.; Kim, K.H.

J. Biol. Chem. 265, 13695-13701, 1990

A:Title: Acetyl-CoA carboxylase mRNA species with or without inhibitory coding sequence

A:Reference number: A37119; MUID:90337981; PMID:1974251

A:Accession: B37119

A:Status: preliminary

A:Molecule type: mRNA

A:Residues: 1-26 <KON>

A:Cross-references: GB:M55315

C:Superfamily: human acetyl-CoA carboxylase; biotin carboxylase homology; lipoyl/biotin

C:Keywords: ligase

Query Match 17.2%; Score 28; DB 2; Length 26;

Best Local Similarity 44.4%; Pred. No. 2e+03;

Matches 4; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 9 RNVDNCC 17

|||

DB 2 ROLKNTCV 10

RESULT 13

I57726

major outer membrane protein A(3b) - Escherichia coli

C:Species: Escherichia coli

C:Date: 07-Jun-1996 #sequence_revision 07-Jun-1996 #text_change 09-Jul-2004

C:Accession: I57726

R:Gordon, G.; Gayda, R.C.; Markovitz, A.

Mol. Gen. Genet. 193, 414-421, 1984

A:Title: Sequence of the regulatory region of omp T, the gene specifying major outer mem

A:Reference number: I57726; MUID:84167352; PMID:6323918

A:Accession: I57726

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-26 <RES>

A:Cross-references: UNIPROT:Q47416; EMBL:X00348; NID:G42163; PIDN:CAA25097.1; PID:G4216

Query Match 17.2%; Score 28; DB 2; Length 26;

Best Local Similarity 31.6%; Pred. No. 2e+03;

Matches 6; Conservative 4; Mismatches 5; Indels 4; Gaps 1;

QY 6 YCFRNVDNCCLRPLYIDF 24

|||

DB 9 FCTKNI-----VLRITFFDF 23

RESULT 14

A58175
 delta-conotoxin TxVIIA - cone shell (Conus textile)
 N;Alternate names: conotoxin TxVIIA
 C;Species: Conus textile (cloth-of-gold cone)
 C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
 C;Accession: A58175; S19620
 R;Nakamura, T.; Yu, Z.; Fainzilber, M.; Burlingame, A.L.
 Protein Sci. 5, 524-530, 1996
 A;Title: Mass spectrometric-based revision of the structure of a cysteine-rich peptide
 A;Reference number: A58175; MUID:97022130; PMID:8868490
 A;Contents: correction
 A;Accession: A58175
 A;Molecule type: protein
 A;Residues: 1-27 <NAK>
 A;Cross-references: UNIPROT:P24160
 R;Fainzilber, M.; Gordon, D.; Hasson, A.; Spira, M.E.; Zlotkin, E.
 Eur. J. Biochem. 202, 589-595, 1991
 A;Title: Mollusc-specific toxins from the venom of Conus textile neovivarius.
 A;Reference number: S19553; MUID:92104183; PMID:1761058
 A;Accession: S19620
 A;Molecule type: protein
 A;Residues: 'W', 2-25 <FAI>
 C;Superfamily: omega-conotoxin
 C;Keywords: amidated carboxyl end; carboxylglutamic acid; neurotoxin; sodium channel inhibitor
 F;1-15,8-19,14-24/Disulfide bonds: #status predicted
 F;9,13/Modified site: gamma-carboxylglutamic acid (Glu) #status experimental
 F;27/Modified site: amidated carboxyl end (Phe) #status experimental

Query Match 17.2%; Score 28; DB 1; Length 27;
 Best Local Similarity 38.5%; Pred. No. 2.1e+03;
 Matches 5; Conservative 1; Mismatches 5; Indels 2; Gaps 1;

Qy 4 AAYCFRNVQDNCC 16
 :|||
 Db 5 STYC--EVDSECC 15

RESULT 15

A43620
 omega-conotoxin GVIIA - cone shell (Conus geographus)
 N;Alternate names: shaker peptide GVIIA
 C;Species: Conus geographus (geography cone)
 C;Date: 11-Dec-1992 #sequence_revision 11-Dec-1992 #text_change 09-Jul-2004
 C;Accession: A43620
 R;Olivera, B.M.; Gray, W.R.; Zeikus, R.; McIntosh, J.M.; Varga, J.; Rivier, J.; de Santis
 Science 230, 1338-1343, 1985
 A;Title: Peptide neurotoxins from fish-hunting cone snails.
 A;Reference number: A43620; MUID:86070213; PMID:4071055
 A;Accession: A43620
 A;Molecule type: protein
 A;Residues: 1-29 <OLI>
 A;Cross-references: UNIPROT:P05483
 C;Superfamily: omega-conotoxin
 C;Keywords: acetylcholine release inhibition; calcium channel inhibitor; hydroxyproline;
 F;1-16,8-19,15-26/Disulfide bonds: #status predicted
 F;4,7/Modified site: 4-hydroxyproline (Pro) #status experimental

Query Match 17.2%; Score 28; DB 2; Length 29;
 Best Local Similarity 46.2%; Pred. No. 2.2e+03;
 Matches 6; Conservative 2; Mismatches 3; Indels 2; Gaps 1;

Qy 7 CFRNVQDNC--CL 17
 :|||
 Db 8 CSRGVDRDCTCCL 20

Search completed: October 29, 2004, 08:41:21
 Job time : 38 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 29, 2004, 08:11:43 ; Search time 37 Seconds
(without alignments)
75.413 Million cell updates/sec

Title: US-09-822-873-1

Perfect score: 163

Sequence: 1 ALDAAFCFRNVQDNCCLRLPYIDFKRDLG 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: PIR.79.**

2: PIR.2.**

3: PIR.3.**

4: PIR.4.**

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	163	100.0	43	2 B26356	transforming growt
2	163	100.0	112	2 A61439	transforming growt
3	163	100.0	412	2 A39489	transforming growt
4	163	100.0	414	1 WFMKB2	transforming growt
5	163	100.0	414	1 WFMKB2	transforming growt
6	163	100.0	414	2 A31249	transforming growt
7	163	100.0	442	2 B31249	transforming growt
8	160	98.2	413	1 WFXB22	transforming growt
9	133	81.6	409	2 S01825	transforming growt
10	133	81.6	410	2 A41397	transforming growt
11	133	81.6	410	2 A55706	transforming growt
12	133	81.6	412	2 A34939	transforming growt
13	133	81.6	412	2 A36169	transforming growt
14	111	68.1	130	2 I48196	transforming growt
15	111	68.1	315	2 A40057	transforming growt
16	111	68.1	390	1 WPHU2	transforming growt
17	111	68.1	390	1 WFM52	transforming growt
18	111	68.1	390	2 A26960	transforming growt
19	111	68.1	390	2 JC4023	transforming growt
20	111	68.1	390	2 A27512	transforming growt
21	111	68.1	390	2 T46463	transforming growt
22	111	68.1	390	2 S02199	transforming growt
23	111	68.1	391	2 S01413	transforming growt
24	100	61.3	34	2 C42320	transforming growt
25	96	58.9	71	2 A40699	transforming growt
26	96	58.9	382	2 B61036	transforming growt
27	95	58.3	373	2 A41918	transforming growt
28	52	31.9	89	1 IPMTA2	bombyxin A-2 precu
29	52	31.9	89	2 S69483	bombyxin A-8 precu

30	52	31.9	89	2	S69484	bombyxin A-8 precu
31	52	31.9	92	1	IPMTA3	bombyxin A-3 precu
32	52	31.9	92	2	S69482	bombyxin A-7 precu
33	52	31.9	92	2	JO0825	bombyxin A-9 precu
34	52	31.9	92	2	S69477	bombyxin A-4 precu
35	52	31.9	92	2	S69481	bombyxin A-7 precu
36	52	31.9	92	2	S69478	bombyxin A-6 precu
37	52	31.9	92	2	S69479	bombyxin A-5 precu
38	52	31.9	92	2	A48322	bombyxin A-1 precu
39	52	31.9	402	2	T37849	hypothetical prote
40	50.5	31.0	478	2	S16867	gene H5 protein -
41	49	30.1	87	2	S69490	bombyxin B-10 prec
42	49	30.1	87	2	JO0836	bombyxin B-10 - si
43	48	29.4	88	2	S69489	bombyxin B-8 precu
44	48	29.4	90	1	IPMTA1	bombyxin B-1 precu
45	48	29.4	90	1	IPMTA2	bombyxin B-2 precu

ALIGNMENTS

RESULT 1

B26356

transforming growth factor beta-2 - pig (fragment)

C:Species: Sus scrofa domestica (domestic pig)

C>Date: 21-May-1988 #sequence_revision 21-May-1988 #text_change 30-Sep-1993

C:Accession: B26356

R:Chalfetz, S.; Weatherbee, J.A.; Tsang, M.L.S.; Anderson, J.K.; Mole, J.E.; Lucas, R.; N

Cell 48, 409-415, 1987

A:Title: The transforming growth factor-beta system, a complex pattern of cross-reactive

A:Reference number: A90890; MUID:87102890; PMID:2879635

A:Accession: B26356

A:Molecule type: protein

A:Residues: 1-43 <CHE>

C:Superfamily: inhibin

C:Keywords: growth factor

Query Match 100.0%; Score 163; DB 2; Length 43;

Best Local Similarity 100.0%; Pred. No. 1.9e-16;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQDNCCLRLPYIDFKRDLG 29

Db 1 ALDAAFCFRNVQDNCCLRLPYIDFKRDLG 29

RESULT 2

A61439

transforming growth factor beta-2 - bovine

N:Alternate names: cartilage-inducing factor B; MGF-a; milk growth factor a

C:Species: Bos primigenius taurus (cattle)

C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C:Accession: A61439; A25485; B42320; S15389

R:Jin, Y.; Cox, D.A.; Knecht, R.; Raschdorf, F.; Cerletti, N.

J. Protein Chem. 10, 565-575, 1991

A:Title: Separation, purification, and sequence identification of TGF-beta1 and TGF-beta2

A:Reference number: A61439; MUID:92189724; PMID:1799413

A:Accession: A61439

A:Molecule type: protein

A:Residues: 1-112 <JIN>

A:Cross-references: UNIPROT:P21214

A:Experimental source: milk

R:Seyedin, S.M.; Segarini, P.R.; Rosen, D.M.; Thompson, A.V.; Bentz, H.; Graycar, J.

J. Biol. Chem. 262, 1946-1949, 1987

A:Title: Cartilage-inducing factor-B is a unique protein structurally and functionally re

A:Reference number: A25485; MUID:87137406; PMID:3469199

A:Accession: A25485

A:Molecule type: protein

A:Residues: 1-30 <SEY>

A:Experimental source: bone

R:Ogawa, Y.; Schmidt, D.K.; Dasch, J.R.; Chang, R.J.; Glaser, C.B.

J. Biol. Chem. 267, 2325-2328, 1992

A:Title: Purification and characterization of transforming growth factor-beta2.3 and -bet

A:Reference number: A42320; MUID:32129307; PMID:1733936

A:Accession: B42320

A:Molecule type: protein

A:Residues: 1-6, 'X', 8-14, 'XX', 17-34 <OGA>

A:Experimental source: Bone

R:COX, D.A.; Buerk, R.R.

Eur. J. Biochem. 197, 353-358, 1991

A:Title: Isolation and characterization of milk growth factor, a transforming-growth-factor

A:Reference number: S15389; MUID:91224126; PMID:2026157

A:Accession: S15389

A:Molecule type: protein

A:Residues: 1-16, 'XX', 19 <COX>

A:Experimental source: milk

C:Superfamily: inhibin

C:Keywords: growth factor; growth regulation; heterodimer; homodimer

Query Match 100.0%; Score 163; DB 2; Length 112;

Best Local Similarity 100.0%; Pred. No. 4.6e-16;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPLIYDFKRDLG 29

|||||

Db 1 ALDAAFCFRNVQDNCCLRLPLIYDFKRDLG 29

RESULT 3

A39489

transforming growth factor beta-2 precursor - chicken

N:Alternate names: TGF-beta2

C:Species: Gallus gallus (chicken)

C:Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 09-Jul-2004

C:Accession: A39489; A61018; S25849

R:Burt, D.W.; Paton, I.R.

DNA Cell Biol. 10, 723-734, 1991

A:Title: Molecular cloning and primary structure of the chicken transforming growth factor

A:Reference number: A39489; MUID:92075163; PMID:1683775

A:Accession: A39489

A:Molecule type: DNA

A:Residues: 1-412 <BUR>

A:Cross-references: UNIPROT:P30371; GB:X58071; NID:G63810; PIDN:CAA41101.1; PID:G833616;

R:Jakowlew, S.B.; Dillard, P.J.; Sporn, M.B.; Roberts, A.B.

Growth Factors 2, 123-133, 1990

A:Title: Complementary deoxyribonucleic acid cloning of an mRNA encoding transforming growth

A:Reference number: A61018; MUID:90253805; PMID:2340183

A:Accession: A61018

A:Molecule type: mRNA

A:Status: not compared with conceptual translation

A:Residues: 1-94, 'G', 96-244, 'L', 246-412 <JAK>

C:Genetics:

A:Insertions: 115/1; 169/3; 214/1; 251/1; 309/2; 360/3

C:Superfamily: inhibin

C:Keywords: growth factor; growth regulation; mitogen; transformation

F:1-26/Domain: signal sequence #status predicted <SIG>

F:21-300/Domain: propeptide #status predicted <PRO>

F:301-412/Product: transforming growth factor beta-2 #status predicted <MAT>

Query Match 100.0%; Score 163; DB 2; Length 412;

Best Local Similarity 100.0%; Pred. No. 1.5e-15;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPLIYDFKRDLG 29

|||||

Db 301 ALDAAFCFRNVQDNCCLRLPLIYDFKRDLG 329

RESULT 4

WFMXB2

transforming growth factor beta-2 precursor, short form - green monkey

N:Alternate names: BSC-1 cell growth inhibitor; cartilage-inducing factor B; polyargin

C:Species: Cercopithecus aethiops (green monkey, grivet)

C:Date: 23-Mar-1990 #sequence_revision 19-Oct-1995 #text_change 09-Jul-2004

C:Accession: A34005

R:Hanks, S.K.; Armour, R.; Baldwin, J.H.; Maldonado, F.; Spiess, J.; Holley, R.W.

Proc. Natl. Acad. Sci. U.S.A. 85, 79-82, 1988

A:Title: Amino acid sequence of the BSC-1 cell growth inhibitor (polyargin) deduced from

A:Reference number: A34005; MUID:88124824; PMID:3277172

A:Accession: A34005

A:Molecule type: mRNA

A:Residues: 1-414 <HAN>

A:Cross-references: UNIPROT:P61811; GB:J03585; NID:G176495; PIDN:AAA3358.1; PID:G176496

A:Note: part of this sequence, including the amino end of the active peptide, confirmed by

R:Webb, N.R.; Madisen, L.; Rose, T.M.; Purchio, A.F.

DNA 7, 493-497, 1988

A:Title: Structural and sequence analysis of TGF-beta-2 cDNA clones predicts two different

A:Reference number: A90960; MUID:89090808; PMID:2850146

A:Contents: annotation

A:Note: although they do not show the sequences, a clone identical yielding a sequence ic

with that in the long form of the human sequence

C:Superfamily: inhibin

C:Keywords: alternative splicing; glycoprotein; growth factor; growth regulation; homodin

F:1-19/Domain: signal sequence #status predicted <SIG>

F:20-302/Domain: propeptide #status predicted <PRO>

F:303-414/Product: transforming growth factor beta-2 #status predicted <MAT>

F:72,140,241/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 100.0%; Score 163; DB 1; Length 414;

Best Local Similarity 100.0%; Pred. No. 1.5e-15;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPLIYDFKRDLG 29

|||||

Db 303 ALDAAFCFRNVQDNCCLRLPLIYDFKRDLG 331

RESULT 5

WFMSE2

transforming growth factor beta-2 precursor - mouse

C:Species: Mus musculus (house mouse)

C:Date: 30-Sep-1992 #sequence_revision 30-Sep-1992 #text_change 09-Jul-2004

C:Accession: A40148

R:Miller, D.A.; Lee, A.; Pelton, R.W.; Chen, E.Y.; Moses, H.L.; Derynck, R.

Mol. Endocrinol. 3, 1108-1114, 1989

A:Title: Murine transforming growth factor-beta2 cDNA sequence and expression in adult t

A:Reference number: A40148; MUID:90014832; PMID:2797004

A:Accession: A40148

A:Molecule type: mRNA

A:Residues: 1-414 <MIL>

A:Cross-references: UNIPROT:P27090; EMBL:X57413; NID:G54772; PIDN:CAA40672.1; PID:G54773

C:Comment: None of the three predicted glycosylation sites is in the mature protein.

C:Superfamily: inhibin

C:Keywords: glycoprotein; growth factor; growth regulation; homodimer; mitogen

F:1-19/Domain: signal sequence #status predicted <SIG>

F:20-302/Domain: propeptide #status predicted <PRO>

F:303-414/Product: transforming growth factor beta-2 #status predicted <MAT>

F:72,140,241/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 100.0%; Score 163; DB 1; Length 414;

Best Local Similarity 100.0%; Pred. No. 1.5e-15;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPLIYDFKRDLG 29

|||||

Db 303 ALDAAFCFRNVQDNCCLRLPLIYDFKRDLG 331

RESULT 6

A31249

transforming growth factor beta-2 precursor, short form - human

N:Alternate names: glioblastoma-derived T-cell suppressor factor

C:Species: Homo sapiens (man)

C:Date: 01-Dec-1989 #sequence_revision 19-Oct-1995 #text_change 09-Jul-2004

C:Accession: S06216; A31249

R:de Martin, R.; Haendler, B.; Hofer-Warbinek, R.; Gaugitsch, H.; Wrann, M.; Schluesener,

EMBO J. 6, 3673-3677, 1987

A:Title: Complementary DNA for human glioblastoma-derived T cell suppressor factor, a nov

A:Reference number: S06216; MUID:8811555; PMID:3322813

A:Accession: S06216
A:Molecule type: mRNA
A:Residues: 1-414 <MEM>
A:Cross-references: UNIPROT:P61812; EMBL:Y00083; NID:G31959; PIDN:CAA68279.1; PID:G31960
R:Webb, N.R.; Madisen, L.; Rose, T.M.; Purchio, A.F.
DNA 7, 493-497, 1988
A:Title: Structural and sequence analysis of TGF-beta-2 cDNA clones predicts two different transforming growth factor beta-2 precursor - African clawed frog
A:Reference number: A90960; MUID:89090808; PMID:2850146
A:Accession: A31249
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 101-130 <WEB>
C:Genetics:
A:Gene: GDB:TGF2
A:Cross-references: GDB:120436; OMIM:190220
A:Map position: 1q41-1q41
C:Superfamily: inhibin
C:Keywords: alternative splicing; growth factor
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-302/Domain: propeptide #status predicted <PRO>
F:303-414/Product: transforming growth factor beta-2 #status experimental <MAT>
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Best Local Similarity 100.0%; Pred. No. 1.5e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAVCFRNVDNCCLRPLIYDFKRDGLG 29
DB 303 ALDAAVCFRNVDNCCLRPLIYDFKRDGLG 331
RESULT 7
B31249
transforming growth factor beta-2 precursor, long form - human
C:Species: Homo sapiens (man)
C:Date: 01-Dec-1989 #sequence revision 19-Oct-1995 #text_change 09-Jul-2004
A:Accession: A29478; A54627; A26740; A29798; B31249
R:Madisen, L.; Webb, N.R.; Rose, T.M.; Marquardt, H.; Ikeda, T.; Twardzik, D.; Seyedin, D.N.A. 7, 1-8, 1988
A:Title: Transforming growth factor-beta-2: cDNA cloning and sequence analysis.
A:Reference number: A29478; MUID:88166349; PMID:3162414
A:Accession: A29478
A:Molecule type: mRNA
A:Residues: 1-442 <MAD>
A:Cross-references: UNIPROT:P61812; GB:M19154; GB:M22045; GB:M22046; NID:G339549; PIDN:A
A:Experimental source: adenocarcinoma
R:Noma, T.; Glick, A.B.; Geiser, A.G.; O'Reilly, M.A.; Miller, J.; Roberts, A.B.; Sporn, Growth Factors 4, 247-255, 1991
A:Title: Molecular cloning and structure of the human transforming growth factor-beta2 gene
A:Reference number: A54627; MUID:92110032; PMID:1764261
A:Accession: A54627
A:Molecule type: DNA
A:Residues: 1-31, 'L', 33-115 <NOM>
A:Cross-references: GB:M87843; NID:G339565; PIDN:AAA61162.1; PID:G553792
R:Ikeda, T.; Lioubin, M.N.; Marquardt, H.
Biochemistry 26, 2406-2410, 1987
A:Title: Human transforming growth factor type beta-2: production by a prostatic adenocarcinoma cell line
A:Reference number: A26740; MUID:8721633; PMID:3475130
A:Accession: A26740
A:Status: preliminary
A:Molecule type: protein
A:Residues: 331-381 <IKE>
R:Marquardt, H.; Lioubin, M.N.; Ikeda, T.
J. Biol. Chem. 262, 12127-12131, 1987
A:Title: Complete amino acid sequence of human transforming growth factor type beta-2.
A:Reference number: A29798; MUID:87308213; PMID:3476488
A:Accession: A29798
A:Molecule type: protein
A:Residues: 331-442 <MAR>
R:Webb, N.R.; Madisen, L.; Rose, T.M.; Purchio, A.F.
DNA 7, 493-497, 1988
A:Title: Structural and sequence analysis of TGF-beta-2 cDNA clones predicts two different transforming growth factor beta-2 precursor - African clawed frog
A:Reference number: A90960; MUID:89090808; PMID:2850146

A:Accession: B31249
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 101-158 <WEB>
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A:Gene: GDB:TGF2
A:Cross-references: GDB:120436; OMIM:190220
A:Map position: 1q41-1q41
C:Superfamily: inhibin
C:Keywords: alternative splicing; growth factor
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-330/Domain: propeptide #status predicted <PRO>
F:331-442/Product: transforming growth factor beta-2 #status experimental <MAT>
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Best Local Similarity 100.0%; Pred. No. 1.6e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 331 ALDAAVCFRNVDNCCLRPLIYDFKRDGLG 359
RESULT 8
WFXLB2
transforming growth factor beta-2 precursor - African clawed frog
C:Species: Xenopus laevis (African clawed frog)
C:Date: 12-Feb-1993 #sequence_revision 19-Oct-1995 #text_change 09-Jul-2004
A:Accession: S09510; A61036
R:Rebbert, M.L.; Bhatia-Dey, N.; Dawid, I.B.
Nucleic Acids Res. 18, 2185, 1990
A:Title: The sequence of TGF-beta2 from Xenopus laevis.
A:Reference number: S09510; MUID:90245678; PMID:2336403
A:Accession: S09510
A:Molecule type: mRNA
A:Residues: 1-413 <REB>
A:Cross-references: UNIPROT:P17247; EMBL:X51817; NID:G414789; PIDN:CAA361116.1; PID:G6513;
R:Roberts, A.B.; Rosa, F.; Roche, N.S.; Coligan, J.E.; Garfield, M.; Rebbert, M.L.; Kond Growth Factors 2, 135-147, 1990
A:Title: Isolation and characterization of TGF-beta2 and TGF-beta5 from medium conditioned by 3T3-L1 cells
A:Reference number: A61036; MUID:90253806; PMID:2340184
A:Accession: A61036
A:Molecule type: protein
A:Residues: 302-307, 'X', 309-315, 'XX', 318-319 <ROB>
C:Superfamily: inhibin
C:Keywords: glycoprotein; growth factor; growth regulation; homodimer; mitogen
F:1-19/Domain: signal sequence #status predicted <Sig>
F:20-301/Domain: propeptide #status predicted <PRO>
F:302-413/Product: transforming growth factor beta-2 #status predicted <MAT>
F:72,140,241/Binding site: carbohydrate (Asn) (covalent) #status predicted
Query Match 98.2%; Score 160; DB 1; Length 413;
Best Local Similarity 96.6%; Pred. No. 4e-15;
Matches 28; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAVCFRNVDNCCLRPLIYDFKRDGLG 29
DB 302 ALDAAVCFRNVDNCCLRPLIYDFKRDGLG 330
RESULT 9
S01825
transforming growth factor beta-3 precursor - pig
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 30-Sep-1989 #sequence_revision 30-Sep-1989 #text_change 09-Jul-2004
A:Accession: S01825
R:Derynck, R.; Lindquist, P.B.; Lee, A.; Wen, D.; Tamm, J.; Graycar, J.L.; Rhee, L.; Masc EMBO J. 7, 3737-3743, 1988
A:Title: A new type of transforming growth factor-beta, TGF-beta3.
A:Reference number: S01824; MUID:89091120; PMID:3208746
A:Accession: S01825
A:Molecule type: mRNA
A:Residues: 1-409 <DER>

A/Cross-references: UNIPROT:P15203; EMBL:X14150; NID:g2127; PIDN:CAA32363.1; PID:g2128
C/Superfamily: inhibin
C/Keywords: growth factor
F/1-25/Domain: signal sequence #status predicted <SIG>
F/26-297/Domain: propeptide #status predicted <PRO>
F/298-409/Product: transforming growth factor beta-3 #status predicted <MAT>
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Best Local Similarity 72.4%; Pred. No. 2.8e-11;
Matches 21; Conservative 6; Mismatches 2; Indels 0; Gaps 0;
Qy 1 ALDAAYCFRNVDNCCRLPLYIDFKRDLG 29
Db 298 ALDNYCFRNLENCVVRPLYIDFRQDLG 326
RESULT 10
A/Reference number: A41397; MUID:90190650; PMID:2628730
A/Accession: A41397
A/Molecule type: mRNA
A/Residues: 1-410 <WAT>
C/Cross-references: UNIPROT:P17125; GB:M32745; NID:g201949; PIDN:AAA40422.1; PID:g201950
R/Denhez, F.; Laryatis, R.; Kondaiah, P.; Roberts, A.B.; Sporn, M.B.
Growth Factors 3, 139-146, 1990
A/Title: Cloning by polymerase chain reaction of a new mouse TGF-beta, mTGF-beta3.
A/Reference number: A61039; MUID:91000714; PMID:2206556
A/Accession: A61039
A/Molecule type: mRNA
A/Residues: 1-410 <DEN>
R/Watrin, F.; Scotto, L.; Assoian, R.K.; Wolgemuth, D.J.
Cell Growth Differ. 2, 77-83, 1991
A/Title: Cell lineage specificity of expression of the murine transforming growth factor
A/Reference number: A61225; MUID:91299576; PMID:2069871
A/Accession: A61225
A/Status: translation not shown
A/Molecule type: mRNA
A/Residues: 285-410 <WAT>
C/Superfamily: inhibin
C/Keywords: glycoprotein; growth factor; growth regulation
F/1-21/Domain: signal sequence #status predicted <SIG>
F/22-298/Domain: propeptide #status predicted <PRO>
F/259-261/Region: cell attachment (R-G-D) motif
F/299-410/Product: transforming growth factor beta-3 #status predicted <MAT>
F/72,133,140/Binding site: carbohydrate (Asn) (covalent) #status predicted
Query Match 81.6%; Score 133; DB 2; Length 410;
Best Local Similarity 72.4%; Pred. No. 2.8e-11;
Matches 21; Conservative 6; Mismatches 2; Indels 0; Gaps 0;
Qy 1 ALDAAYCFRNVDNCCRLPLYIDFKRDLG 29
Db 299 ALDNYCFRNLENCVVRPLYIDFRQDLG 327
RESULT 11
A55706
transforming growth factor beta-3 precursor - rat
C/Species: Rattus norvegicus (Norway rat)
C/Date: 03-Mar-1995 #sequence revision 03-Mar-1995 #text_change 09-Jul-2004
C/Accession: A55706; B40699; S36042
R/Wang, J.; Kuliszewski, M.; Yee, W.; Sedlackova, L.; Xu, J.; Tseu, I.; Post, M.
J. Biol. Chem. 270, 2722-2728, 1995
A/Title: Cloning and expression of glucocorticoid-induced genes in fetal rat lung fibroblast
A/Reference number: A55706; MUID:95155340; PMID:7852342

A/Accession: A55706
A/Molecule type: mRNA
A/Residues: 1-410 <WAT>
C/Cross-references: UNIPROT:Q07258; GB:U03491
A/Note: It is uncertain whether Met-1 is the initiator
R/McKinnon, R.D.; Piras, G.; Ida Jr., J.A.; Dubois-Dalcq, M.
J. Cell Biol. 121, 1397-1407, 1993
A/Title: A role for TGF-beta in oligodendrocyte differentiation.
A/Reference number: A40699; MUID:93286190; PMID:8509457
A/Accession: B40699
A/Status: preliminary
A/Molecule type: mRNA
A/Residues: 157-211 <WCX>
A/Cross-references: EMBL:X71903; NID:g311326; PIDN:CAA50722.1; PID:g311327
C/Superfamily: inhibin
Query Match 81.6%; Score 133; DB 2; Length 410;
Best Local Similarity 72.4%; Pred. No. 2.8e-11;
Matches 21; Conservative 6; Mismatches 2; Indels 0; Gaps 0;
Qy 1 ALDAAYCFRNVDNCCRLPLYIDFKRDLG 29
Db 299 ALDNYCFRNLENCVVRPLYIDFRQDLG 327
RESULT 12
A34939
transforming growth factor beta-3 precursor - chicken
C/Species: Gallus gallus (chicken)
C/Date: 13-Jul-1990 #sequence revision 13-Jul-1990 #text_change 09-Jul-2004
C/Accession: A34939; S25850; S36125; S36124; I51181
R/Jakowlew, S.B.; Dillard, P.J.; Kondaiah, P.; Sporn, M.B.; Roberts, A.B.
Mol. Endocrinol. 2, 747-755, 1988
A/Title: Complementary deoxyribonucleic acid cloning of a novel transforming growth factor
A/Reference number: A34939; MUID:89096966; PMID:3211158
A/Accession: A34939
A/Status: preliminary; not compared with conceptual translation
A/Molecule type: mRNA
A/Residues: 1-412 <JAK>
A/Cross-references: UNIPROT:P16047; GB:M31154; NID:g212758; PIDN:AAA49089.1; PID:g212759
R/Burt, D.W.; Paton, I.R.; Dey, B.R.
J. Mol. Endocrinol. 7, 175-183, 1991
A/Title: Comparative analysis of human and chicken transforming growth factor-beta-2 and
A/Reference number: S25850; MUID:92134496; PMID:1840616
A/Accession: S25850
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-117 <BUR>
A/Cross-references: EMBL:X58127; NID:g63815; PIDN:CAA41128.1; PID:g63816
A/Accession: S36125
A/Status: preliminary; nucleic acid sequence not shown; translation not shown
A/Molecule type: DNA
A/Residues: 113-172 <BU2>
A/Cross-references: EMBL:X60055; NID:g396688; PIDN:CAA42853.1; PID:g396689
A/Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1991
A/Accession: S36124
A/Status: preliminary; nucleic acid sequence not shown; translation not shown
A/Molecule type: DNA
A/Residues: 173-322, 'ELPT', 327-412 <BU3>
A/Cross-references: EMBL:X60091
A/Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1991
R/Jakowlew, S.B.; Lechleider, R.; Geiser, A.G.; Kim, S.J.; Santa-Coloma, T.A.; Cubert, J.
Mol. Endocrinol. 6, 1285-1298, 1992
A/Title: Identification and characterization of the chicken transforming growth factor-beta
A/Reference number: I51181; MUID:93024487; PMID:1406706
A/Accession: I51181
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-117 <JUA2>
A/Cross-references: GB:S46000; NID:g257172; PIDN:AAB23575.1; PID:g257173
C/Genetics:
A/Introns: 216/1; 252/1; 309/2; 360/3
A/Note: list of introns may be incomplete

Matches 18; Conservative 5; Mismatches 6; Indels 0; Gaps 0;

Qy 1 ALDAAACFRNVQDNCCLRPLYIDFKRDLG 29

Db 204 ALDTNYCFSSTENCCVRQLYIDFRKDLG 232

Search completed: October 29, 2004, 08:31:08
Job time : 37 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 29, 2004, 08:40:47 ; Search time 126 Seconds
(without alignments)
74.621 Million cell updates/sec

Title: US-09-822-873-1
Perfect score: 163
Sequence: 1 ALDAAFCFRNVQNCCLRPYIDFKRDIG 29

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1370721 seqs, 324215800 residues
Total number of hits satisfying chosen parameters: 313726

Minimum DB seq length: 0
Maximum DB seq length: 29

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA:
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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2	163	100.0	29	14	US-10-240-421-1
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4	93	57.1	20	14	US-10-240-421-4
5	87	53.4	16	15	US-10-430-685-31
6	78	47.9	16	9	US-09-822-873-2
7	70	42.9	16	15	US-10-430-685-29
8	61	37.4	16	9	US-09-822-873-4
9	57	35.0	16	14	US-09-822-873-7
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11	55	33.7	16	14	US-10-240-421-3
12	52	31.9	16	9	US-09-822-873-6
13	52	31.9	16	14	US-10-240-421-5

14	50	30.7	15	14	US-10-350-405-212	Sequence 212, Appl
15	49	30.1	9	9	US-09-748-038B-28	Sequence 28, Appl
16	47	28.8	20	14	US-10-339-740-226	Sequence 226, App
17	44	27.0	16	9	US-09-822-873-3	Sequence 3, Appli
18	44	27.0	16	14	US-10-240-421-2	Sequence 2, Appli
19	44	27.0	17	14	US-10-074-152-6	Sequence 6, Appli
20	41	25.2	13	15	US-10-390-585-27	Sequence 27, Appl
21	40.5	24.8	26	10	US-09-910-082A-383	Sequence 383, App
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23	40	24.5	11	15	US-10-430-685-16	Sequence 16, Appl
24	40	24.5	23	10	US-09-214-592-1	Sequence 1, Appli
25	39	23.9	29	14	US-10-218-876-8	Sequence 8, Appli
26	38	23.3	11	15	US-10-609-217-107	Sequence 107, App
27	38	23.3	11	15	US-10-632-388-107	Sequence 107, App
28	38	23.3	11	15	US-10-651-723-107	Sequence 107, App
29	38	23.3	11	15	US-10-645-761-107	Sequence 107, App
30	38	23.3	11	15	US-10-666-696-107	Sequence 107, App
31	38	23.3	11	15	US-10-653-048-107	Sequence 107, App
32	38	23.3	26	9	US-09-864-761-41574	Sequence 41574, A
33	37.5	23.0	27	14	US-10-352-254-16	Sequence 16, Appl
34	37.5	23.0	27	14	US-10-352-254-25	Sequence 25, Appl
35	37.5	23.0	27	15	US-10-627-685-16	Sequence 16, Appl
36	37.5	23.0	27	15	US-10-627-685-25	Sequence 25, Appl
37	37	22.7	11	15	US-10-430-685-18	Sequence 18, Appl
38	36.5	22.4	27	14	US-10-352-254-18	Sequence 18, Appl
39	36.5	22.4	27	15	US-10-627-685-18	Sequence 18, Appl
40	36.5	22.4	29	14	US-10-029-386-32828	Sequence 32828, A
41	36	22.1	11	15	US-10-430-685-37	Sequence 37, Appl
42	36	22.1	15	9	US-09-759-143-804	Sequence 804, App
43	36	22.1	15	9	US-09-759-143-804	Sequence 805, App
44	36	22.1	15	9	US-09-780-669-804	Sequence 804, App
45	36	22.1	15	9	US-09-780-669-805	Sequence 805, App

ALIGNMENTS

RESULT 1
US-09-822-873-1
; Sequence 1, Application US/09822873
; Patent No. US20020160012A1
; GENERAL INFORMATION:
; APPLICANT: KAASTRUP, Peter
; TITLE OF INVENTION: VACCINE CHIP TECHNOLOGY EXPLOITING IMMUNO-STIMULATING FRAGMENT C
; FILE REFERENCE: KAASTRUP-1A
; CURRENT APPLICATION NUMBER: US/09/822, 873
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: US 60/246, 973
; PRIOR FILING DATE: 2000-11-13
; PRIOR APPLICATION NUMBER: DK PA2000 00540
; PRIOR FILING DATE: 2000-03-31
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 1
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-822-873-1

Query Match 100.0%; Score 163; DB 9; Length 29;
Best Local Similarity 100.0%; Pred. No. 1.8e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 2
US-10-240-421-1
; Sequence 1, Application US/10240421
; Publication No. US20030190322A1

Db 1 CLRPLYIDFKRDLG 14

RESULT 7

US-10-430-685-29

Sequence 29, Application US/10430685

Publication No. US20040039543A1

GENERAL INFORMATION:

APPLICANT: KECK, Peter

TITLE OF INVENTION: COMPUTER METHOD AND APPARATUS FOR CLASSIFYING OBJECTS

FILE REFERENCE: 63040-010210

CURRENT APPLICATION NUMBER: US/10/430,685

CURRENT FILING DATE: 2003-05-06

PRIOR APPLICATION NUMBER: PCT/US01/44000

PRIOR FILING DATE: 2001-11-06

PRIOR APPLICATION NUMBER: 60/246,196

PRIOR FILING DATE: 2000-11-06

NUMBER OF SEQ ID NOS: 240

SOFTWARE: Patentin version 3.2

SEQ ID NO 29

LENGTH: 16

TYPE: PRT

ORGANISM: Homo sapiens

US-10-430-685-29

Query Match 42.9%; Score 70; DB 15; Length 16;

Best Local Similarity 73.3%; Pred. No. 0.0074;

Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

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RESULT 8

US-09-822-873-4

Sequence 4, Application US/09822873

Patent No. US20020160012A1

GENERAL INFORMATION:

APPLICANT: KAASTRUP, Peter

TITLE OF INVENTION: VACCINE CHIP TECHNOLOGY EXPLOITING IMMUNO-STIMULATING FRAGMENT OF

FILE REFERENCE: KAASTRUP=1A

CURRENT APPLICATION NUMBER: US/09/822,873

CURRENT FILING DATE: 2001-04-02

PRIOR APPLICATION NUMBER: US 60/246,973

PRIOR FILING DATE: 2000-11-13

PRIOR APPLICATION NUMBER: DK PA2000 00540

PRIOR FILING DATE: 2000-03-31

NUMBER OF SEQ ID NOS: 8

SOFTWARE: Patentin version 3.1

SEQ ID NO 4

LENGTH: 16

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: TGF-beta fragment

US-09-822-873-4

Query Match 37.4%; Score 61; DB 9; Length 16;

Best Local Similarity 71.4%; Pred. No. 0.13;

Matches 10; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 16 CLRPLYIDFKRDLG 29

Db 1 CCLRPLYIDFKRDLG 14

RESULT 9

US-09-822-873-7

Sequence 7, Application US/09822873

Patent No. US20020160012A1

GENERAL INFORMATION:

APPLICANT: KAASTRUP, Peter

TITLE OF INVENTION: VACCINE CHIP TECHNOLOGY EXPLOITING IMMUNO-STIMULATING FRAGMENT OF

FILE REFERENCE: KAASTRUP=1A

CURRENT APPLICATION NUMBER: US/09/822,873

CURRENT FILING DATE: 2001-04-02

PRIOR APPLICATION NUMBER: US 60/246,973

PRIOR FILING DATE: 2000-11-13

PRIOR APPLICATION NUMBER: DK PA2000 00540

PRIOR FILING DATE: 2000-03-31

NUMBER OF SEQ ID NOS: 8

SOFTWARE: Patentin version 3.1

SEQ ID NO 4

LENGTH: 16

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: TGF-beta fragment

US-09-822-873-7

Query Match 37.4%; Score 61; DB 9; Length 16;

Best Local Similarity 71.4%; Pred. No. 0.13;

Matches 10; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 16 CLRPLYIDFKRDLG 29

Db 1 CCLRPLYIDFKRDLG 14

RESULT 10

US-10-240-421-6

Sequence 6, Application US/10240421

Publication No. US20030190322A1

GENERAL INFORMATION:

APPLICANT: KAASTRUP, Peter

TITLE OF INVENTION: IMMUNOSTIMULATING PROPERTIES OF A FRAGMENT OF TGF-BETA

FILE REFERENCE: KAASTRUP=2

CURRENT APPLICATION NUMBER: US/10/240,421

CURRENT FILING DATE: 2002-09-30

NUMBER OF SEQ ID NOS: 7

SOFTWARE: Patentin version 3.2

SEQ ID NO 6

LENGTH: 16

TYPE: PRT

ORGANISM: Artificial

FEATURE:

OTHER INFORMATION: Mutant of fragment of TGF beta

US-10-240-421-6

Query Match 35.0%; Score 57; DB 14; Length 16;

Best Local Similarity 71.4%; Pred. No. 0.46;

Matches 10; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 16 CLRPLYIDFKRDLG 29

Db 1 CCLRPLYIDFKRDLG 14

RESULT 11

US-10-240-421-6

Sequence 6, Application US/10240421

Publication No. US20030190322A1

GENERAL INFORMATION:

APPLICANT: KAASTRUP, Peter

TITLE OF INVENTION: IMMUNOSTIMULATING PROPERTIES OF A FRAGMENT OF TGF-BETA

FILE REFERENCE: KAASTRUP=2

CURRENT APPLICATION NUMBER: US/10/240,421

CURRENT FILING DATE: 2002-09-30

NUMBER OF SEQ ID NOS: 7

SOFTWARE: Patentin version 3.2

SEQ ID NO 6

LENGTH: 16

TYPE: PRT

ORGANISM: Artificial

FEATURE:

OTHER INFORMATION: Mutant of fragment of TGF beta

US-10-240-421-6

Query Match 35.0%; Score 57; DB 14; Length 16;

Best Local Similarity 71.4%; Pred. No. 0.46;

Matches 10; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 16 CLRPLYIDFKRDLG 29

Db 1 CCLRPLYIDFKRDLG 14

US-10-240-421-3
 ; Sequence 3, Application US/10240421
 ; Publication No. US20030190322A1
 ; GENERAL INFORMATION:
 ; APPLICANT: KAASTRUP, Peter
 ; TITLE OF INVENTION: IMMUNOSTIMULATING PROPERTIES OF A FRAGMENT OF TGF-BETA
 ; FILE REFERENCE: KAASTRUP-2
 ; CURRENT APPLICATION NUMBER: US/10/240,421
 ; CURRENT FILING DATE: 2002-09-30
 ; NUMBER OF SEQ ID NOS: 7
 ; SOFTWARE: PatentIn version 3.2
 ; SEQ ID NO 3
 ; LENGTH: 16
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-240-421-3

Query Match 33.7%; Score 55; DB 14; Length 16;
 Best Local Similarity 54.3%; Pred. No. 0.88;
 Matches 9; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Qy 16 CLRPLYIDFKRDGLG 29
 |.|||:|:|
 Db 1 CVRQLYIDFKXKKG 14

RESULT 12
 US-09-822-873-6
 ; Sequence 6, Application US/09822873
 ; Patent No. US20020160012A1
 ; GENERAL INFORMATION:
 ; APPLICANT: KAASTRUP, Peter
 ; TITLE OF INVENTION: VACCINE CHIP TECHNOLOGY EXPLOITING IMMUNO-STIMULATING FRAGMENT OF
 ; FILE REFERENCE: KAASTRUP-1A
 ; CURRENT APPLICATION NUMBER: US/09/822,873
 ; CURRENT FILING DATE: 2001-04-02
 ; PRIOR APPLICATION NUMBER: US 60/246,973
 ; PRIOR FILING DATE: 2000-11-13
 ; PRIOR APPLICATION NUMBER: DK PA2000 00540
 ; PRIOR FILING DATE: 2000-03-31
 ; NUMBER OF SEQ ID NOS: 8
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 6
 ; LENGTH: 16
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Analogue of TGF-beta fragment
 ; NAME/KEY: (2)..(2)
 ; OTHER INFORMATION: Xaa is Val or Leu
 ; NAME/KEY: misc_feature
 ; LOCATION: (4)..(4)
 ; OTHER INFORMATION: Xaa is Pro or Gln
 ; NAME/KEY: misc_feature
 ; LOCATION: (10)..(10)
 ; OTHER INFORMATION: Xaa is Arg or Lys
 ; NAME/KEY: misc_feature
 ; LOCATION: (11)..(11)
 ; OTHER INFORMATION: Xaa is Lys or Gln
 ; OTHER INFORMATION: Xaa is Lys or Gln

Query Match 31.9%; Score 52; DB 9; Length 16;
 Best Local Similarity 71.4%; Pred. No. 2.3;
 Matches 10; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 16 CLRPLYIDFKRDGLG 29
 |.|||:|:|
 Db 1 CXRXLYIDFXDXLG 14

RESULT 13

US-10-240-421-5
 ; Sequence 5, Application US/10240421
 ; Publication No. US20030190322A1
 ; GENERAL INFORMATION:
 ; APPLICANT: KAASTRUP, Peter
 ; TITLE OF INVENTION: IMMUNOSTIMULATING PROPERTIES OF A FRAGMENT OF TGF-BETA
 ; FILE REFERENCE: KAASTRUP-2
 ; CURRENT APPLICATION NUMBER: US/10/240,421
 ; CURRENT FILING DATE: 2002-09-30
 ; NUMBER OF SEQ ID NOS: 7
 ; SOFTWARE: PatentIn version 3.2
 ; SEQ ID NO 5
 ; LENGTH: 16
 ; TYPE: PRT
 ; ORGANISM: Artificial
 ; FEATURE:
 ; OTHER INFORMATION: Genomic sequence for the mutated fragment of TGF-beta
 ; NAME/KEY: misc_feature
 ; LOCATION: (2)..(2)
 ; OTHER INFORMATION: X is Val or Leu
 ; FEATURE:
 ; NAME/KEY: misc_feature
 ; LOCATION: (4)..(4)
 ; OTHER INFORMATION: X is Pro or Gln
 ; FEATURE:
 ; NAME/KEY: misc_feature
 ; LOCATION: (10)..(10)
 ; OTHER INFORMATION: X is Arg or Lys
 ; FEATURE:
 ; NAME/KEY: misc_feature
 ; LOCATION: (11)..(11)
 ; OTHER INFORMATION: X is Lys, Arg, or Gln
 US-10-240-421-5

Query Match 31.9%; Score 52; DB 14; Length 16;
 Best Local Similarity 71.4%; Pred. No. 2.3;
 Matches 10; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 16 CLRPLYIDFKRDGLG 29
 |.|||:|:|
 Db 1 CXRXLYIDFXDXLG 14

RESULT 14
 US-10-350-405-212
 ; Sequence 212, Application US/10350405
 ; Publication No. US20030215894A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Nirvan, Henry L.
 ; TITLE OF INVENTION: Polypeptide-Induced Monoclonal Receptors
 ; TITLE OF INVENTION: to Protein Ligands
 ; FILE REFERENCE: TSRI 35.5 CON 7/LIG
 ; CURRENT APPLICATION NUMBER: US/10/350,405
 ; CURRENT FILING DATE: 2003-01-24
 ; PRIOR APPLICATION NUMBER: 09/427,576
 ; PRIOR FILING DATE: 1999-10-26
 ; PRIOR APPLICATION NUMBER: 08/461,583
 ; PRIOR FILING DATE: 1995-06-02
 ; PRIOR APPLICATION NUMBER: 08/294,879
 ; PRIOR FILING DATE: 1994-08-23
 ; PRIOR APPLICATION NUMBER: 08/054,864
 ; PRIOR FILING DATE: 1993-04-28
 ; PRIOR APPLICATION NUMBER: 07/900,502
 ; PRIOR FILING DATE: 1992-06-16
 ; PRIOR APPLICATION NUMBER: 07/780,415
 ; PRIOR FILING DATE: 1991-10-22
 ; NUMBER OF SEQ ID NOS: 227
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 212
 ; LENGTH: 15
 ; TYPE: PRT
 ; ORGANISM: retrovirus

US-10-350-405-212

Query Match 30.7%; Score 50; DB 14; Length 15;
Best Local Similarity 53.3%; Pred. No. 4.1;
Matches 8; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

Qy 1 ALDAAACFRNVQDNC 15
||| ||| : ||
Db 1 ALDNYCFSSTKNC 15

RESULT 15

US-09-748-038B-28
; Sequence 28, Application US/09748038B
; Publication No. US20020040004A1
; GENERAL INFORMATION:
; APPLICANT: Benedict, James J.
; APPLICANT: Ranieri, John P.
; APPLICANT: Whitney, Marsha L.
; APPLICANT: Akella, Rama
; TITLE OF INVENTION: METHOD OF PROMOTING NATURAL BYPASS
; FILE REFERENCE: SBI-042-CIP
; CURRENT APPLICATION NUMBER: US/09/748,038B
; CURRENT FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 09/173,989
; PRIOR FILING DATE: 1998-10-16
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 28
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Bos Taurus
US-09-748-038B-28

Query Match 30.1%; Score 49; DB 9; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.2e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAACFR 9
||| ||| |||
Db 1 ALDAAACFR 9

Search completed: October 29, 2004, 08:52:21
Job time : 128 secs

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GenCore version 5.1.1.6
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OM protein - protein search, using sw model

Run on: October 31, 2004, 14:15:38 ; Search time 60 Seconds
(without alignments)
173.386 Million cell updates/sec

Title: US-09-822-873-1

Perfect score: 163

Sequence: 1 ALDAAYCFNVDNCLRLPYIDFKRDLG 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A Genesecp23Sep04: *
1: Genesecp1980s: *
2: Genesecp1990s: *
3: Genesecp2000s: *
4: Genesecp2001s: *
5: Genesecp2002s: *
6: Genesecp2003as: *
7: Genesecp2003bs: *
8: Genesecp2004s: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	163	100.0	29	4	AAG78516 Immunosti
2	163	100.0	30	1	AAP81600 N-termina
3	163	100.0	30	1	AAP90112 N-terminu
4	163	100.0	30	2	AAR08144 Human car
5	163	100.0	30	2	AAR22972 Cartilage
6	163	100.0	60	4	AAB68686 Human TGF
7	163	100.0	112	1	AAP80462 Sequence
8	163	100.0	112	2	AAR12403 Transform
9	163	100.0	112	2	AAR39643 Transform
10	163	100.0	112	2	AAR39644 Transform
11	163	100.0	112	2	AAR39639 Mature hu
12	163	100.0	112	2	AAR92776 Hybrid TGF
13	163	100.0	112	2	AAR92774 Human TGF
14	163	100.0	112	2	AAR91960 Human TGF
15	163	100.0	112	2	AAR91957 Human tra
16	163	100.0	112	2	AAR08174 TGF activ
17	163	100.0	112	2	AAR97092 The matur
18	163	100.0	112	2	AAR08300 Human gro
19	163	100.0	112	2	AAR4208 Transform
20	163	100.0	112	3	AAY92011 Human tra
21	163	100.0	112	4	AAB35938 TGF-beta
22	163	100.0	112	5	AAM51940 Human TGF
23	163	100.0	112	6	ABU08657 Human tra
24	163	100.0	112	8	ADH11599 Human bon
25	163	100.0	112	8	ABM79531 Human tra

26	163	100.0	115	4	AAB73205 TGF-beta2
27	163	100.0	115	6	ABG76034 Human TGF
28	163	100.0	387	6	ABU52611 Human NOV
29	163	100.0	390	2	AAR20126 Sequence
30	163	100.0	413	5	AAR77102 Human tra
31	163	100.0	414	2	AAR83055 Transform
32	163	100.0	414	2	AAR73597 Human TGF
33	163	100.0	414	5	ABJ05593 Breast ca
34	163	100.0	414	8	ADJ76133 Marker ge
35	163	100.0	414	8	ADJ75306 Marker ge
36	163	100.0	427	8	ADQ17020 Murine TGF
37	163	100.0	431	8	ADQ17022 Murine TGF
38	163	100.0	442	1	AAP91899 Sequence
39	163	100.0	442	2	AAR05748 Human TGF
40	163	100.0	442	2	AAR20125 Sequence
41	163	100.0	442	2	AAR79922 Human tra
42	163	100.0	442	8	ADH11591 Human bon
43	160	98.2	30	1	AAP71243 Partial N
44	160	98.2	30	1	AAP80081 N-termina
45	160	98.2	30	2	AAR14285 Cartilage

ALIGNMENTS

RESULT 1
AAG78516
ID AAG78516 standard; peptide; 29 AA.
XX AAG78516;
XX AC
XX 22-JAN-2002 (first entry)
XX DE Immunostimulating N-terminal TGF-beta fragment.
XX KW TGF-beta; Transforming growth factor-beta; Immunostimulating; Vaccine;
XX KW Antibody; Cytokine; Immunise.
XX OS Homo sapiens.
XX FN WO200172331-A1.
XX PD 04-OCT-2001.
XX PF 30-MAR-2001; 2001WO-DK000218.
XX PR 31-MAR-2000; 2000DK-00000540.
XX PR 13-NOV-2000; 2000US-0246973P.
XX (VACC-) VACCINE CHIP TECHNOLOGY APS.
XX Kaastrup P;
XX WPI; 2001-639205/73.

A composition containing a fragment of transforming growth factor-beta with an immunogenic determinant provides increased immunogenicity of the determinant and is useful as a vaccine.

Claim 2; Page 68; 88pp; English.

The invention relates to an immunogenic composition comprising a fragment of transforming growth factor-beta (TGF-beta) capable of eliciting an immunostimulating effect, and an immunogenic determinant against which the immunogenic response is required. It is believed that when an individual is immunised with a composition comprising the TGF-beta fragment of the invention, antibodies against the fragment are generated. Following immunisation, these antibodies may also bind to naturally occurring immunosuppressing cytokines of the immunised individual. This may then result in the blocking and/or reduction of the effect of the effect of naturally occurring cytokines on the immune system. The TGF-beta fragments of the invention have immunostimulant activity, and as a result may be of use in the manufacture of a medicament for enhancing the

CC immunostimulating effects of an immunisation. The current sequence
 CC represents the immunostimulating N-terminal TGF-beta fragment
 XX
 SQ Sequence 29 AA;
 Query Match 100.0%; Score 163; DB 4; Length 29;
 Best Local Similarity 100.0%; Pred. No. 8e-15; Indels 0; Gaps 0;
 Matches 29; Conservative 0; Mismatches 0;
 QY 1 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 29
 DB 1 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 2
 AAP81600
 ID AAP81600 standard; protein; 30 AA.
 XX
 AC AAP81600;
 XX
 DT 25-MAR-2003 (revised)
 DT 10-MAR-2003 (revised)
 DT 14-SEP-1990 (first entry)
 XX
 DE N-terminal sequence of the chains of a dimeric polypeptide co-factor for
 DE inducing cartilage formation.
 XX
 KW Dimeric polypeptide; cartilage/bone formation inducing co-factor;
 KW osteoporosis treatment; connective tissue deposition;
 KW beta-type transforming growth factor (TGF-beta); cellular proliferation.
 XX
 OS Mammalia.
 XX
 PN US4774322-A.
 XX
 PD 27-SEP-1988.
 XX
 PF 10-DEC-1987; 87US-00129864.
 XX
 PR 16-JUL-1984; 84US-00630938.
 PR 08-JUL-1985; 85EP-00304848.
 PR 19-AUG-1985; 85US-00767144.
 PR 10-DEC-1987; 87US-00131209.
 PR 08-JUN-1988; 88US-00204173.
 XX
 PA (CLGE) COLLAGEN CORP.
 XX
 PI Seyedin S, Thmoas T, Bentz H, Ellingswor L, Armstrong R;
 XX
 WPI; 1988-292489/41.
 XX
 PT New polypeptide co-factor - for inducing cartilage formation and
 PT promoting connective tissue deposition and cell proliferation, isolated
 PT from mammalian bone.
 XX
 PS Claim 1(d); Page 12; 15pp; English.
 XX
 CC The polypeptide is found in mammalian bone, is active in beta-type
 CC transforming growth factor (TGF-beta) assay, and is a dimer of m.w. about
 CC 26000 (by SDS-PAGE). The polypeptide can be used (opt. together with co-
 CC factors) to induce cartilage/bone formation (e.g. for repair,
 CC replacement, etc. or in treatment of osteoporosis); to promote connective
 CC tissue deposition (in absence of any activator or co-factor) and to
 CC promote cellular proliferation (e.g. for burn or wound healing). It is
 CC also active in the anchorage-independent cell growth assay to
 CC characterise TGF-beta. The polypeptide is prep'd. as follows;
 CC demineralised bone is extracted with a chaotropic agent to solubilise non
 CC -fibrous proteins, then the extract gel-filtered to recover a 10000-
 CC 45000 m.w. fraction. This is adsorbed on to carboxymethylcellulose cation
 CC exchanger at pH 4.5-5.5 (pref. 4.8) under denaturing conditions and
 CC eluted with an NaCl gradient. The 0.15-0.25 M NaCl eluate is purified by
 CC reverse-phase HPLC or gel electrophoresis to separate the polypeptide
 CC (Updated on 10-MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003

CC to correct PR field.)
 XX
 SQ Sequence 30 AA;
 Query Match 100.0%; Score 163; DB 1; Length 30;
 Best Local Similarity 100.0%; Pred. No. 8.2e-15;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 29
 DB 1 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 3
 AAP90112
 ID AAP90112 standard; peptide; 30 AA.
 XX
 AC AAP90112;
 XX
 DT 24-OCT-2003 (revised)
 DT 25-MAR-2003 (revised)
 DT 15-NOV-1989 (first entry)
 XX
 DE N-terminus of cartilage-inducing factor B.
 DE
 XX
 KW Cartilage-inducing factor B; cell proliferation;
 KW transforming growth factor beta; bone growth promoting; bovine;
 KW chondrogenic; wound and burn healing; tissue repair.
 XX
 OS Bos taurus; (Bovine).
 XX
 PN US4843063-A.
 XX
 PD 27-JUN-1989.
 XX
 PF 08-JUN-1988; 88US-00204173.
 XX
 PR 16-JUL-1984; 84US-00630938.
 PR 08-JUL-1985; 85EP-00304848.
 PR 19-AUG-1985; 85US-00767144.
 PR 10-DEC-1987; 87US-00129864.
 PR 10-DEC-1987; 87US-00131209.
 XX
 PA (CLGE) COLLAGEN CORP.
 XX
 PI Seyedin S, Thomas T, Ellingswor L, Armstrong R;
 XX
 WPI; 1989-241418/33.
 XX
 PT Cell proliferation promotion and treatment of osteoporosis - using
 PT compsns. contg. cartilage-inducing factors and co-factor.
 XX
 PS Claim 8; Page 65; 14pp; English.
 XX
 CC N-terminus of cartilage-inducing factor B (CIF-B). It is: isolated from
 CC bovine bone; active in a transforming growth factor beta assay; is a co-
 CC factor for inducing cartilage formation in vivo; is found as a dimer of
 CC 26 kD. The CIFS (see AAP9011) have in vitro chondrogenic activity alone,
 CC in vivo chondrogenic activity with co-factors, in vivo connective tissue
 CC deposition activity alone and in vitro TGF-beta activity when combined
 CC with epidermal growth factor. The patent claims a compsn. of TGF-beta and
 CC CIF-A/B which can be used for wound and burn healing and tissue repair.
 CC (Updated on 25-MAR-2003 to correct PR field.) (Updated on 24-OCT-2003 to
 CC standardise OS field)
 XX
 SQ Sequence 30 AA;
 Query Match 100.0%; Score 163; DB 1; Length 30;
 Best Local Similarity 100.0%; Pred. No. 8.2e-15;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ALDAAYCFRNVQDNCCLRLPLYIDFKRDLG 29

Db 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

RESULT 4

AAR08144
ID AAR08144 standard; protein; 30 AA.

XX AAR08144;
AC AC
DT 25-MAR-2003 (revised)
DT 28-FEB-1991 (first entry)
XX
DE Human cartilage inducing factor homodimer chain.

XX Transforming growth factor; cartilages inducing factor; CTF;
KW polycythemia; thrombocytosis; splenomegaly.
XX
XX Homo sapiens.

XX US4971952-A.

XX 20-NOV-1990.

XX 27-OCT-1988; 88US-00263635.

XX 06-AUG-1985; 85US-00763337.

XX 06-MAR-1986; 86US-00836672.

XX (CLGE) COLLAGEN CORP.

XX Bentz H, Ellingsworth L, Armstrong R;

XX WPI; 1990-368150/49.

XX Treating inflammation associated with transplants, etc. - using cartilage
PT inducing factor polypeptide homo:dimer cpd.
XX
XX Claim 1; Col 20; 14pp; English.

XX CTFs may be useful for inhibition of acute/chronic inflammation and
CC treatment of red blood cell dysfunction associated with polycythemia,
CC thrombocytosis or splenomegaly. (Updated on 25-MAR-2003 to correct PR
CC field.)

XX Sequence 30 AA;

Query Match 100.0%; Score 163; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 8.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

Db 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

RESULT 5

AAR22972
ID AAR22972 standard; protein; 30 AA.

XX AAR22972;

XX 09-JAN-2003 (revised)

DT 17-SEP-1992 (first entry)

XX Cartilage-inducing factor-B.

XX Cartilage-inducing factor-B; transforming growth factor-beta;

KW B cell production; anti-inflammatory; bone marrow transplantation;

KW chemotherapy; granulopoiesis.

XX Bos sp.

XX WO9204912-A.

XX 02-APR-1992.

XX 20-SEP-1991; 91WO-US006850.

XX 21-SEP-1990; 90US-00586363.

XX (CELT-) CELTRIX LAB INC.

XX Carlino J, Singh N, Ellingsworth L;

XX WPI; 1992-131884/16.

XX Cartilage-inducing factor of human placental polypeptide - for prodn. of B-
PT cells in peripheral blood or to induce granulopoiesis, for humoral
PT immunity.

XX Disclosure; Page 9; 22pp; English.

XX Cartilage inducing factor-B is a transforming growth factor-beta 2. It is
CC used to prepare medicaments to induce B cell prodn. in peripheral blood
CC or for inducing granulopoiesis. Such medicaments are used to treat
CC patients with depressed B cell counts or humoral immunity, eg irradiated
CC bone marrow recipients, those receiving chemotherapy, or those with
CC congenital B cell growth or function disorders. CTF-B is obtd. from
CC diverse animal sources or by recombinant DNA technology. Its most common
CC usage will be as an anti-inflammatory in humans and domestic animals
CC such as cattle, cats and horses. (Updated on 09-JAN-2003 to add missing
CC OS field.)

XX Sequence 30 AA;

Query Match 100.0%; Score 163; DB 2; Length 30;
Best Local Similarity 100.0%; Pred. No. 8.2e-15;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

Db 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

RESULT 6

AAB68686

ID AAB68686 standard; protein; 60 AA.

XX AAB68686;

XX 03-MAY-2001 (first entry)

DT Human TGFbeta2 protein #1.

XX Human; transforming growth factor beta2; TGFbeta2; SELEX;

KW systemic evolution of ligands by exponential enrichment.

XX Homo sapiens.

XX WO200109156-A1.

XX 08-FEB-2001.

XX 26-JUL-2000; 2000WO-US020397.

XX 29-JUL-1999; 99US-00363939.

XX (NEXS-) NEXSTAR PHARM INC.

XX Pagratis N, Lochrie M, Gold L;

XX WPI; 2001-218217/22.

XX New RNA ligand to human transforming growth factor beta2, useful as
PT pharmaceuticals, diagnostics and as immunohistochemical reagents.

PS Disclosure; Page 71; 178pp; English.

XX The present invention relates to non-naturally occurring, high-affinity
CC RNA ligands to human transforming growth factor beta2 (TGFbeta2). The
CC oligonucleotide ligands were identified by the SELEX method (SELEX stands
CC for Systemic Evolution of Ligands by Exponential Enrichment). The
CC oligonucleotide ligands are useful in any process in which binding to
CC TGFbeta2 is required. The ligands may be useful as pharmaceuticals,
CC diagnostics, imaging agents and immunohistochemical reagents

XX Sequence 60 AA;

Query Match 100.0%; Score 163; DB 4; Length 60;
Best Local Similarity 100.0%; Pred. No. 1.6e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAACFRNVQDNCCLRLPLYIDFKRDLG 29
Db 1 ALDAAACFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 7

AAP80462
ID AAP80462 standard; protein; 112 AA.

XX AAP80462;

XX 25-MAR-2003 (revised)
DT 09-JAN-2003 (revised)
DT 05-NOV-1990 (first entry)

XX Sequence from which new transforming growth factor polypeptide(s) are
DE derived.

XX Carcinoma treatment; tumour treatment.

XX Homo sapiens.

XX EP290012-A.

XX 09-NOV-1988.

XX 04-MAY-1988; 88EP-00107174.

XX 04-MAY-1987; 87US-00046946.

XX 30-OCT-1987; 87US-00115776.

XX (ONCO) ONCOGEN.

XX (BRIM) BRISTOL-MYERS CO.

XX Marquardt H, Ikeda T, Lioubin MN;

XX WPI; 1988-316293/45.

XX New transforming growth factor polypeptide(s) - used for treating
PT hormonally responsive carcinoma(s), prodn. of antibodies and in
PT diagnosis.

XX Claim 10; Page 14; 17pp; English.

XX A substantially pure polypeptide composition having AA sequence given in
CC AAP80462 is claimed. Also claimed is a polypeptide comprising AA sequence
CC of at least eight AAs included in the sequence in AAP80462. The eight
CC polypeptide (designated TGF-beta2) may be used in the treatment of
CC hormonally responsive carcinomas. The TGF-beta2 and fragments can also be
CC used in diagnostics. (Updated on 09-JAN-2003 to add missing OS field.)
CC (Updated on 25-MAR-2003 to correct PA field.)

XX Sequence 112 AA;

Query Match 100.0%; Score 163; DB 1; Length 112;
Best Local Similarity 100.0%; Pred. No. 3.1e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAACFRNVQDNCCLRLPLYIDFKRDLG 29
Db 1 ALDAAACFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 8

AAR12403
ID AAR12403 standard; protein; 112 AA.

XX AAR12403;

XX 25-MAR-2003 (revised)

DT 29-AUG-1991 (first entry)

XX Transforming Growth Factor beta 2.

XX TGF-beta2; biologically active protein production.

XX Homo sapiens.

XX EP433225-A.

XX 19-JUN-1991.

XX 27-NOV-1990; 90EP-00810922.

XX 06-DEC-1989; 89GB-00027546.

XX (CIBA) CIBA GEIGY AG.

XX (NOVS) NOVARTIS AG.

XX (NOVS) NOVARTIS-ERFINDUNGEN VERWALTUNGS GMBH.

XX WPI; 1991-180005/25.

XX N-PSDB; AAQ11994.

XX Prodn. of Transforming Growth Factor type-beta-like proteins - by
PT subjecting denatured monomeric form to refolding conditions.

XX Example; Page 27; 35pp; English.

XX The TGF-beta2 coding sequence was isolated from the CI-215 human glioma
CC cell line. It was incorporated into an appropriate vector to transform
CC Saccharomyces cerevisiae or E. coli. Monomeric TGF-beta2 was purified,
CC denatured and dissolved in 140ml 50mM Tris/HCl pH8. 1M NaCl, 5mM EDTA,
CC 2mM reduced glutathione, 1mM oxidised glutathione and 3mM Chaps. After
CC 72 hrs at 4 deg C, pH was adjusted to 2.5 and the mixture was conc. 10
CC times. The conc. soln was diluted to the original vol. with 10mM HCl and
CC conc to a final vol of 10 ml. The supernatant from centrifugation at
CC 5000g for 30 min contained disulphide-linked dimeric TGF-beta2. (Updated
CC on 25-MAR-2003 to correct PA field.)

XX Sequence 112 AA;

Query Match 100.0%; Score 163; DB 2; Length 112;
Best Local Similarity 100.0%; Pred. No. 3.1e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAACFRNVQDNCCLRLPLYIDFKRDLG 29
Db 1 ALDAAACFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 9

AAR39643
ID AAR39643 standard; protein; 112 AA.

XX AAR39643;

XX 25-MAR-2003 (revised)

DT 26-AUG-1993 (first entry)

XX Transforming Growth Factor-beta2(44/45)beta1 hybrid.

XX hTGF-beta1; hTGF-beta2; hybrid protein; wound healing; cancer treatment;
 KW bone repair; growth regulation.
 XX Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Region 1. .44
 FT /note= "amino acids 1-44 of hTGF-beta2"
 FT Region 45. .112
 FT /note= "amino acids 45-112 of hTGF-beta1"
 XX
 XX EP542679-A1.
 XX
 PD 19-MAY-1993.
 XX
 PF 03-NOV-1992; 92EP-00810845.
 XX
 PR 11-NOV-1991; 91EP-00810870.
 XX
 PA (CIBA) CIBA GEIGY AG.
 XX
 PI McMaster GK, Cox D, Cerletti N, Kuhla J;
 XX WPI; 1993-161126/20.
 DR N-PSDB; AAQ41604.
 XX
 XX New hybrid transforming growth factor-beta molecules - comprise portions
 PT of mature TGF-beta isoforms; useful as wound healants, cardioprotective,
 PT antiinflammatory and immunosuppressive agents etc.
 XX
 PS Claim 8; Page 28; 48pp; English.
 XX
 CC The invention covers hybrid TGF-beta molecules consisting of parts of the
 CC human isoforms TGF-beta1, TGF-beta2 and TGF-beta3 (see AAQ41599, AAQ41600
 CC and AAQ41601, respectively). The hinge points between parts derived from
 CC different parent isoforms are pref. between amino acids 44 and 45, 56 and
 CC 57, 79 and 80, 90 and 91, or 22 and 23. Of the 30 possible hybrids using
 CC these hinge points and one part each from two of the isoforms, 6 are
 CC preferred including the hybrid TGF-beta2(44/45)beta1. The hybrid
 CC molecules promote cell migration, inhibit the growth of A375 melanoma
 CC cells, accelerate the healing of partial-thickness burn wounds and full-
 CC thickness incisional wounds and increase formation of fibrous granular
 CC tissue. See AAQ41602-041607 for the most pref. hybrids. (Updated on 25-
 CC MAR-2003 to correct PN field.)
 XX
 SQ Sequence 112 AA;
 Query Match 100.0%; Score 163; DB 2; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ALDAAFCFRNVQDNCCLRPPLYIDFKRDLG 29
 DB 1 ALDAAFCFRNVQDNCCLRPPLYIDFKRDLG 29
 RESULT 10
 AAR39644
 ID AAR39644 standard; protein; 112 AA.
 XX
 AC AAR39644;
 XX
 DT 25-MAR-2003 (revised)
 DT 26-AUG-1993 (first entry)
 XX
 XX Transforming Growth Factor-beta2(44/45)beta3 hybrid.
 XX
 DE hTGF-beta2; hTGF-beta3; hybrid protein; wound healing; cancer treatment;
 KW bone repair; growth regulation.
 KW
 XX Homo sapiens.
 OS

FH Key Location/Qualifiers
 FT Region 1. .44
 FT /note= "amino acids 1-44 of hTGF-beta2"
 FT Region 45. .112
 FT /note= "amino acids 45-112 of hTGF-beta3"
 XX
 XX EP542679-A1.
 XX
 PD 19-MAY-1993.
 XX
 PF 03-NOV-1992; 92EP-00810845.
 XX
 PR 11-NOV-1991; 91EP-00810870.
 XX
 PA (CIBA) CIBA GEIGY AG.
 XX
 PI McMaster GK, Cox D, Cerletti N, Kuhla J;
 XX WPI; 1993-161126/20.
 DR N-PSDB; AAQ41605.
 XX
 XX New hybrid transforming growth factor-beta molecules - comprise portions
 PT of mature TGF-beta isoforms; useful as wound healants, cardioprotective,
 PT antiinflammatory and immunosuppressive agents etc.
 XX
 PS Claim 8; Page 29-30; 48pp; English.
 XX
 CC The invention covers hybrid TGF-beta molecules consisting of parts of the
 CC human isoforms TGF-beta1, TGF-beta2 and TGF-beta3 (see AAQ41599, AAQ41600
 CC and AAQ41601, respectively). The hinge points between parts derived from
 CC different parent isoforms are pref. between amino acids 44 and 45, 56 and
 CC 57, 79 and 80, 90 and 91, or 22 and 23. Of the 30 possible hybrids using
 CC these hinge points and one part each from two of the isoforms, 6 are
 CC preferred including the hybrid TGF-beta2(44/45)beta3. The hybrid
 CC molecules promote cell migration, inhibit the growth of A375 melanoma
 CC cells, accelerate the healing of partial-thickness burn wounds and full-
 CC thickness incisional wounds and increase formation of fibrous granular
 CC tissue. See AAQ41602-041607 for the most pref. hybrids. (Updated on 25-
 CC MAR-2003 to correct PN field.)
 XX
 SQ Sequence 112 AA;
 Query Match 100.0%; Score 163; DB 2; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ALDAAFCFRNVQDNCCLRPPLYIDFKRDLG 29
 DB 1 ALDAAFCFRNVQDNCCLRPPLYIDFKRDLG 29
 RESULT 11
 AAR39639
 ID AAR39639 standard; protein; 112 AA.
 XX
 AC AAR39639;
 XX
 DT 25-MAR-2003 (revised)
 DT 26-AUG-1993 (first entry)
 XX
 XX Mature human Transforming Growth Factor-beta2.
 XX
 DE hTGF-beta2; hybrid protein; wound healing; cancer treatment; bone repair;
 KW growth regulation.
 KW
 XX Homo sapiens.
 XX
 PD EP542679-A1.
 PD 19-MAY-1993.
 XX
 PF 03-NOV-1992; 92EP-00810845.
 XX

PR	11-NOV-1991;	91EP-00810870.
XX	(CIBA) CIBA GEIGY AG.	
PA	Mcmaster GK, Cox D, Cerletti N, Kuhla J;	
PI	WPI; 1993-161126/20.	
DR	N-PSDB; AAQ41600.	
XX	New hybrid transforming growth factor-beta molecules - comprise portions	
PT	of mature TGF-beta isoforms; useful as wound healants, cardioprotective,	
PT	antiinflammatory and immunosuppressive agents etc.	
XX	Claim 4; Page 22-23; 48pp; English.	
PS	The invention covers hybrid TGF-beta molecules consisting of parts of the	
CC	human isoforms TGF-beta1, TGF-beta2 and TGF-beta3 (see AAQ41599, AAQ41600	
CC	and AAQ41601, respectively). The hinge points between parts derived from	
CC	different parent isoforms are pref. between amino acids 44 and 45, 56 and	
CC	57, 79 and 80, 90 and 91, or 22 and 23. The hybrid molecules promote cell	
CC	migration, inhibit the growth of A375 melanoma cells, accelerate the	
CC	healing of partial-thickness burn wounds and full-thickness incisional	
CC	wounds and increase formation of fibrous granular tissue. See e.g.	
CC	AAQ41602-Q41607 for pref. hybrids. (Updated on 25-MAR-2003 to correct PN	
CC	field.)	
XX	Sequence 112 AA;	
SQ		
Query Match	100.0%; Score 163; DB 2; Length 112;	
Best Local Similarity	100.0%; Pred. No. 3.1e-14;	
Matches	29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	1 ALDAAACFRNVQDNCCCLRLPYIDFKRDLG 29	
DB	1 ALDAAACFRNVQDNCCCLRLPYIDFKRDLG 29	
RESULT 12		
AAR92776		
ID	AAR92776 standard; protein; 112 AA.	
XX		
AC	AAR92776;	
XX		
DT	17-JUL-1996 (first entry)	
XX		
DE	Human TGF-beta 2.	
XX		
KW	Transforming growth factor type beta; TGF-beta 2; protein renaturation;	
KW	protein folding.	
XX		
OS	Homo sapiens.	
XX		
PN	WO9603433-A1.	
XX		
PD	08-FEB-1996.	
XX		
PF	12-JUL-1995; 95WO-EF002719.	
XX		
PR	25-JUL-1994; 94EP-00810439.	
XX		
PA	(CIBA) CIBA GEIGY AG.	
XX		
PI	Cerletti N;	
XX		
DR	WPI; 1996-117000/12.	
XX	N-PSDB; AAT17236.	
DR		
XX	Prodn. of dimeric biologically active transforming growth factor - by	
PT	refolding denatured monomer in detergent-free folding buffer contg.	
PT	specific organic solvent to improve yield.	
XX		
PS	Example 1B; Page 31-32; 54pp; English.	
XX		
CC	Non-soluble, monomeric transforming growth factor TGF-beta 2 (AAR92774)	
CC	was recovered from E. coli LC 137 (DSM 5658) transformants carrying	
CC	plasmid pPLMu.TGF-beta 2, which includes the coding sequence (AAT17236)	
CC	for TGF-beta 2. A biologically active, dimeric form of TGF-beta 2 was	
CC	obtd. by refolding this monomer in detergent-free buffer contg. DMSO	
CC	and/or DMF. Dimers of TGF-beta 1 (AAR92773) and TGF-beta 3 (AAR92772),	
CC	and hybrid dimers (see also AAR92775-77), were also produced	
XX		
SQ	Sequence 112 AA;	
Query Match	100.0%; Score 163; DB 2; Length 112;	
Best Local Similarity	100.0%; Pred. No. 3.1e-14;	
Matches	29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	1 ALDAAACFRNVQDNCCCLRLPYIDFKRDLG 29	
DB	1 ALDAAACFRNVQDNCCCLRLPYIDFKRDLG 29	
RESULT 12		
AAR92776		
ID	AAR92776 standard; protein; 112 AA.	
XX		
AC	AAR92776;	
XX		
DT	17-JUL-1996 (first entry)	
XX		
DE	Hybrid TGF-beta 2-3.	
XX		
KW	Transforming growth factor type beta; TGF-beta 2; TGF-beta 3;	
KW	protein renaturation; protein folding.	
XX		
OS	Synthetic.	
XX		
FH	Location/Qualifiers	
FT	Protein	
FT	/note= "amino acids 1-44 of human TGF-beta2"	
FT	45..112	
FT	/note= "amino acids 45-112 of human TGF-beta3"	
XX		
PN	WO9603433-A1.	
XX		
PD	08-FEB-1996.	
XX		
XX		
PF	12-JUL-1995; 95WO-EF002719.	
XX		
PR	25-JUL-1994; 94EP-00810439.	
XX		
PA	(CIBA) CIBA GEIGY AG.	
XX		
PI	Cerletti N;	
XX		
DR	WPI; 1996-117000/12.	
DR	N-PSDB; AAT17238.	
XX		

Query Match 100.0%; Score 163; DB 2; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 29
 |||||
 DB 1 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 29
 |||||

RESULT 14
 AAR91960
 ID AAR91960 standard; protein; 112 AA.
 XX
 AC AAR91960;
 XX
 DT 10-JUN-1996 (first entry)
 XX
 DE Human TGF-beta-like protein, TGF-beta-2-3.
 XX
 KW Transforming growth factor beta; TGF; regulator; method; proliferation;
 XX
 KW differentiation; wound healing; solvent.
 XX
 OS Homo sapiens.
 XX
 PH Key Location/Qualifiers
 FT Peptide 1..44
 FT /note= "N-terminal 44 amino acids of TGF-beta-2"
 FT Peptide 45..112
 FT /note= "C-terminal 68 amino acids of TGF-beta-3"
 XX
 PN WO9603432-A1.
 XX
 XX 08-FEB-1996.
 PD
 XX 12-JUL-1995; 95WO-EP002718.
 PF
 XX 25-JUL-1994; 94EP-00810438.
 PR
 XX (CIBA) CIBA GEIGY AG.
 PA
 XX Cerletti N;
 PI
 XX WPI; 1996-116999/12.
 DR
 XX N-PSDB; AAT15466.
 DR
 XX Prodn. of dimeric, biologically active transforming growth factor beta -
 PT by refolding denatured monomer in buffer contg. mild detergent and
 PT specific organic solvents to improve yields.
 XX
 PS Claim 17; Page 43; 59pp; English.
 XX
 CC AAR91960 is transforming growth factor (TGF) beta-like protein, TGF-beta-
 CC 2-3. TGF beta-2-3 is a hybrid of TGF-2 and TGF-3. TGF beta hybrids were
 CC made using a new process of producing dimeric, biologically active TGF
 CC beta-like proteins. The new process involves treating denatured TGF beta
 CC monomers with folding buffer contg. a mild detergent (CHAPS, CHAPSO or
 CC digitonin) and at least one of the solvents DMSO (dimethyl sulphoxide),
 CC DMSO2 (dimethylsulphone) and DMF (dimethyl formamide). The detergent
 CC allows folding of the monomer such that, after dimerisation, the TGF beta
 CC -like protein retains biological activity and remains in soluble form.
 CC The method allows relatively high yields of biologically active TGF beta-
 CC like proteins in their native dimeric form. TGF-beta like proteins are
 CC multifunctional regulators of cellular activity and a typical use is to
 CC stimulate wound healing
 XX
 XX Sequence 112 AA;

Query Match 100.0%; Score 163; DB 2; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 29
 |||||
 DB 1 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 29
 |||||

RESULT 16
 AAW08174
 ID AAW08174 standard; peptide; 112 AA.
 XX
 AC AAW08174;
 XX
 XX

DB 1 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 29
 |||||
 DB 1 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 29
 |||||

RESULT 15
 AAR91957
 ID AAR91957 standard; protein; 112 AA.
 XX
 AC AAR91957;
 XX
 DT 10-JUN-1996 (first entry)
 XX
 DE Human transforming growth factor beta 2.
 XX
 KW Transforming growth factor beta; TGF; regulator; method; proliferation;
 XX
 KW differentiation; wound healing; solvent.
 XX
 OS Homo sapiens.
 XX
 PN WO9603432-A1.
 XX
 PD 08-FEB-1996.
 XX
 PF 12-JUL-1995; 95WO-EP002718.
 PR
 XX 25-JUL-1994; 94EP-00810438.
 PA
 XX (CIBA) CIBA GEIGY AG.
 PI
 XX Cerletti N;
 PI
 XX WPI; 1996-116999/12.
 DR
 XX N-PSDB; AAT15463.
 DR
 XX Prodn. of dimeric, biologically active transforming growth factor beta -
 PT by refolding denatured monomer in buffer contg. mild detergent and
 PT specific organic solvents to improve yields.
 XX
 PS Claim 17; Page 35-36; 59pp; English.
 XX
 CC AAR91956-R91958 are the amino acid sequences of human transforming growth
 CC factor (TGF) beta-1, TGF beta-2 and TGF beta-3 which are used to produce
 CC TGF beta-like proteins in dimeric form. The TGF beta-like proteins
 CC produced are hybrids of 2 different types of TGF beta e.g. TGF beta-1-3,
 CC TGF beta-2-3, etc, or bone morphogenic proteins e.g. BMP-2. The TGF beta
 CC hybrids were made using a new process of producing dimeric, biologically
 CC active TGF beta-like proteins. The new process involves treating
 CC denatured TGF beta monomers with folding buffer contg. a mild detergent
 CC (CHAPS, CHAPSO or digitonin) and at least one of the solvents DMSO
 CC (dimethyl sulphoxide), DMSO2 (dimethylsulphone) and DMF (dimethyl
 CC formamide). The detergent allows folding of the monomer such that, after
 CC dimerisation, the TGF beta-like protein retains biological activity and
 CC remains in soluble form. The method allows relatively high yields of
 CC biologically active TGF beta-like proteins in their native dimeric form.
 CC TGF-beta like proteins are multifunctional regulators of cellular
 CC activity and a typical use is to stimulate wound healing
 XX
 XX Sequence 112 AA;

Query Match 100.0%; Score 163; DB 2; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 29
 |||||
 DB 1 ALDAAYCFRNVDNCCRLRLYIDFKRDLG 29
 |||||

RESULT 16
 AAW08174
 ID AAW08174 standard; peptide; 112 AA.
 XX
 AC AAW08174;
 XX
 XX

DT 26-AUG-1997 (first entry)
 XX TGF active fragment of a TGF-beta fusion protein.
 DE Transforming growth factor-beta fusion protein; wound healing;
 XX artificial skin; surgery recovery time.
 KW Homo sapiens.
 XX WO9639430-A1.
 XX 12-DEC-1996.
 XX 05-JUN-1996; 96WO-US008973.
 XX 06-JUN-1995; 95US-00470837.
 XX (HALL/) HALL F L.
 PA (NIMN/) NIMNI M E.
 PA (TUAN/) TUAN T.
 PA (WULL/) WU L.
 PA (CHEU/) CHEUNG D T.
 XX Hall FL, Nimni ME, Tuan T, Wu L, Cheung DT;
 XX WPI; 1997-043065/04.
 DR N-PSDB; AAT42772.
 XX Prepn. of transforming growth factor-beta fusion protein - useful to
 PT reduce surgery recovery time and to prepare artificial skin.
 PT Claim 12; Page 47-48; 59pp; English.
 XX A novel transforming growth factor-beta (TGF-beta) fusion protein
 CC comprises a purification tag and a TGF active fragment. The present
 CC sequence represents a specifically claimed TGF active fragment.
 CC Additionally, the fusion protein may comprise proteinase-sensitive linker
 CC sites and binding domain so the protein sequence may contain some or all
 CC of the following elements: purification tag; proteinase site; ECM binding
 CC site; proteinase site; TGF-beta. TGF-beta promotes wound healing, and the
 CC fusion protein can be used to reduce surgery recovery time and in the
 CC preparation of artificial skin. The inclusion of a purification tag
 CC facilitates purification of the fusion protein. The proteinase site is
 CC included to permit cleavage and release of the purification tag after
 CC purification if desired. The extracellular matrix binding site
 CC facilitates delivery of the fusion protein to the desired site of action.
 CC Delivery of the TGF-beta to the site to be treated reduces the amount of
 CC TGF-beta required to be administered to be effective and reduces the
 CC concentration of circulating TGF-beta which may result in undesirable
 CC effects
 XX SQ Sequence 112 AA;
 Query Match 100.0%; Score 163; DB 2; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ALDAAVCFRNVQNCCLRLPLYIDFKDGLG 29
 DB 1 ALDAAVCFRNVQNCCLRLPLYIDFKDGLG 29
 RESULT 17
 AAW97092
 ID AAW97092 standard; protein; 112 AA.
 XX AAW97092;
 AC AAW97092;
 XX 20-MAR-2003 (revised)
 DT 28-APR-1999 (first entry)
 XX The mature form of transforming growth factor-beta-2.

KW Transforming growth factor-beta-2; TGF-beta-like protein;
 KW S-sulphonated TGF-beta-like protein; wound treatment; cancer;
 KW bone repair; tissue repair; bone marrow protective agent;
 KW cardioprotection; anti-inflammatory; immunosuppressive; ulcer; bed sore.
 XX Homo sapiens.
 XX EP891985-A1.
 XX 20-JAN-1999.
 XX 27-NOV-1990; 98EP-00113487.
 XX 06-DEC-1989; 89GB-00027546.
 XX 27-NOV-1990; 90EP-00810922.
 XX (NOVS) NOVARTIS AG.
 XX Cerletti N, McMaster GK, Cox D, Schmitz A, Meyhack B;
 XX WPI; 1999-093520/08.
 DR N-PSDB; AAX15246.
 XX Producing biologically active dimeric Transforming Growth Factor-beta -
 PT by refolding new monomeric Transforming Growth Factor-beta, useful for
 PT treatment of wounds and cancer.
 XX Example 1; Page 29; 32pp; English.
 XX The present sequence represents the mature form of transforming growth
 CC factor-beta-2. Dimeric, biologically active TGF-beta-like protein can be
 CC produced by subjecting the denatured monomeric form to refolding
 CC conditions. The new monomeric S-sulphonated TGF-beta-like protein is
 CC useful for the production of the dimeric, biologically active TGF-beta-
 CC like protein, which is useful for the treatment of wounds (surface or
 CC internal) and cancer in a mammal, in bone and tissue repair, as a bone
 CC marrow protective agent, a mediator of cardioprotection, for the
 CC production of an anti-inflammatory or immunosuppressive preparation.
 CC Treatment is useful for animals, especially humans, and wound treatment
 CC (e.g. ulcers, bed sores etc.) is particularly useful for the elderly.
 CC (Updated on 20-MAR-2003 to correct PF field.) (Updated on 20-MAR-2003 to
 CC correct PR field.)
 XX SQ Sequence 112 AA;
 Query Match 100.0%; Score 163; DB 2; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ALDAAVCFRNVQNCCLRLPLYIDFKDGLG 29
 DB 1 ALDAAVCFRNVQNCCLRLPLYIDFKDGLG 29
 RESULT 18
 AAY08300
 ID AAY08300 standard; protein; 112 AA.
 XX AAY08300;
 AC AAY08300;
 XX 14-JUL-1999 (first entry)
 DT Human growth factor protein fragment TGF-Beta2.
 DE Growth factor; human; dimer; cysteine knot; cellular inclusion body;
 KW pharmaceutical.
 KW Homo sapiens.
 OS DE19748734-A1.
 XX 06-MAY-1999.
 XX

PF 05-NOV-1997; 97DE-01048734.
XX
PR 05-NOV-1997; 97DE-01048734.
XX
PA (GBFB) GES BIOTECHNOLOGISCHE FORSCHUNG MBH.
XX
PI Kaerst U, Mueller C, Rinas U, Weich H, Erdmann H;
XX
XX WPI; 1999-278785/24.
XX
PT Preparing active growth factor dimers from inclusion bodies in high
PT yield.
XX
PS Claim 14; Page 12; 14pp; German.
XX
CC This invention describes the novel preparation of biologically active
CC dimers of recombinant human growth factors of the cysteine knot family
CC starting from cellular inclusion bodies. Such dimers are useful in
CC pharmaceutical compositions and the method provides yields of 31-39.7%,
CC in examples, compared with about 10% for the conventional method (see
CC Biochemistry, 28 (1989) 2956). AAY08278-Y08301 are human growth factor
CC protein fragments used in the method of the invention
XX
SQ Sequence 112 AA;
Query Match 100.0%; Score 163; DB 2; Length 112;
Best Local Similarity 100.0%; Pred. No. 3.1e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAVCFRNVDNCCRLRPLYIDFKRDLG 29
DB 1 ALDAAVCFRNVDNCCRLRPLYIDFKRDLG 29
RESULT 19
AAW84208
ID AAW84208 standard; protein; 112 AA.
XX
AC AAW84208;
XX
DT 25-MAR-1999 (first entry)
XX
DE Transforming growth factor beta active fragment.
XX
KW Proteinase site; bone morphogenetic fusion protein; bone binding site;
KW bone morphogenetic protein; transforming growth factor beta;
KW active fragment; wound healing; bone growth; purification tag.
XX
OS Homo sapiens.
XX
PN WO9855137-A1.
XX
PD 10-DEC-1998.
XX
PF 02-JUN-1998; 98WO-US011189.
XX
PR 03-JUN-1997; 97US-00868452.
XX
PA (NIMN/) NIMNI M E.
PA (HALL/) HALL F L.
PA (WULL/) WU L.
PA (HANB/) HAN B.
PA (SHOR/) SHORS E C.
XX
PI Nimni ME, Hall FL, Wu L, Han B, Shors EC;
XX
XX WPI; 1999-059875/05.
DR N-PSDB; AAV99376.
XX
XX New bone morphogenetic fusion proteins - comprising a purification tag
PT and a bone morphogenetic active fragment, used for enhancing wound
PT healing or bone growth.
XX

PS Disclosure; Page 42-43; 64pp; English.
XX
CC The present sequence represents a transforming growth factor beta active
CC fragment. The protein can be used in place of a bone morphogenetic active
CC morphogenetic active fragment is used, the fusion proteins are designated
CC bone morphogenetic fusion proteins. The bone morphogenetic fusion protein
CC may contain some or all of the following elements: a purification tag, a
CC proteinase site, an ECM/bone binding site, a second proteinase site, and
CC a bone morphogenetic protein active fragment. The bone morphogenetic
CC fusion proteins can be used for enhancing wound healing or bone growth
XX
SQ Sequence 112 AA;
Query Match 100.0%; Score 163; DB 2; Length 112;
Best Local Similarity 100.0%; Pred. No. 3.1e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAVCFRNVDNCCRLRPLYIDFKRDLG 29
DB 1 ALDAAVCFRNVDNCCRLRPLYIDFKRDLG 29
RESULT 20
AAV92011
ID AAV92011 standard; protein; 112 AA.
XX
AC AAV92011;
XX
DT 19-JUL-2000 (first entry)
XX
DE Human transforming growth factor beta 2 monomer.
XX
KW human transforming growth factor beta 2 monomer; CKGF; mutant;
KW cysteine knot growth factor; hairpin loop; infertility.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 1..20
FT /note= "optionally mutated to increase electrostatic
FT interaction between beta hairpin structure and a
FT receptor"
FT Domain 21..40
FT /label= beta_hairpin_loop_1
FT /note= "mutant optionally comprises one or more
FT substitutions in these residues"
FT Misc-difference 41..81
FT /note= "optionally mutated to increase electrostatic
FT interaction between beta hairpin structure and a
FT receptor"
FT Domain 82..102
FT /label= beta_hairpin_loop_3
FT /note= "mutant optionally comprises one or more
FT substitutions in these residues"
FT Misc-difference 103..112
FT /note= "optionally mutated to increase electrostatic
FT interaction between beta hairpin structure and a
FT receptor"
WO200017360-A1.
30-MAR-2000.
19-MAR-1999; 99WO-US005908.
22-SEP-1998; 98WO-US019772.
(UYMA-) UNIV MARYLAND BALTIMORE.
Weintraub BD, Szekulinski MW;
WPI; 2000-283585/24.

XX New mutant cysteine knot growth factor proteins comprising one or more
 PT mutant subunits, useful for treating or preventing diseases e.g.
 PT hypothyroidism and thyroid cancer.
 XX
 PS Claim 208; Page 301; 320pp; English.
 XX
 CC This is the wild type human transforming growth factor beta 2 monomer.
 CC Mutants comprise at least one electrostatic charge altering mutation in a
 CC beta hairpin loop, resulting in increased bioactivity. Mutant cysteine
 CC knot growth factor (CKGF) proteins comprising one or more mutant subunits
 CC and having novel properties or improved pharmacological properties,
 CC compared to wild type CKGFs, are claimed. The CKGF superfamily comprises
 CC at least four families of growth factors: the glycoprotein hormones, the
 CC platelet-derived growth factor (PDGF) family, the neurotrophins and the
 CC transforming growth factor-beta family; the families are known to be
 CC structurally similar (especially comprising the cysteine knot topology)
 CC and it was shown that mutations at certain positions in the CKGF hairpin
 CC loops of family members and other members of the CKGF superfamily could
 CC significantly alter the biological activities of the CKGF. Mutant
 CC transforming growth factor family proteins or analogues are useful for
 CC treatment of ovulatory dysfunction, luteal phase defect, unexplained
 CC infertility, time-limited conception and in assisted reproduction
 XX
 SQ Sequence 112 AA;

Query Match 100.0%; Score 163; DB 3; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
 |||||
 Db 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

RESULT 21
 AAB35938
 ID AAB35938 standard; protein; 112 AA.
 AC AAB35938;
 XX
 XX 26-FEB-2001 (first entry)
 DT
 DE TGF-beta 2 amino acid sequence.
 XX
 KW Heparin binding; vascular graft; matrix; cell adhesion; growth factor;
 KW wound healing; dermal wound; wound healing; TGF-beta 2.
 XX
 OS Unidentified.
 XX
 PN WC200064481-A1.
 XX
 PD 02-NOV-2000.
 XX
 PF 22-APR-1999; 99WO-IB000800.
 XX
 PR 22-APR-1999; 99WO-IB000800.
 XX
 PA (ETHZ-) ETH ZURICH & UNIV ZURICH.
 XX
 PI Sakiyama SE, Hubbell JA;
 XX
 DR WPI; 2001-024627/03.
 XX
 PT Matrix for controlled release of growth factor for wound healing, has
 PT substrate that attaches heparin binding peptide, protein growth factor
 PT that bind heparin with low affinity, and heparin or heparin-like polymer.
 XX
 XX Example 5; Page 21; 48pp; English.
 PS
 CC This invention relates to a matrix comprising a substrate capable of
 CC providing attachment of a heparin binding peptide (HBP), a peptide
 CC comprising a binding domain which binds heparin with high affinity,

CC heparin or heparin-like polymer, and a protein growth factor or peptide
 CC fragment which has a domain that binds heparin with low affinity.
 CC Included in the invention is a vascular graft comprising the matrix,
 CC which is capable of supporting cell adhesion. The matrix is used for
 CC delivering low heparin binding affinity growth factor proteins or
 CC peptides in a controlled manner suitable for wound healing. The matrix
 CC can be used in an article for treating dermal wounds, and in an
 CC implantable sterilized composition capable of supporting cell adhesion.
 CC The present sequence represents a growth factor protein. The protein is
 CC used in an example illustrating that non-heparin-binding growth factors
 CC can be released in a controlled manner from heparin-based drug delivery
 XX systems based on their low affinity for heparin
 SQ Sequence 112 AA;

Query Match 100.0%; Score 163; DB 4; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
 |||||
 Db 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

RESULT 22
 AAM51940
 ID AAM51940 standard; protein; 112 AA.
 XX
 AC AAM51940;
 XX
 XX 01-FEB-2002 (first entry)
 DT
 DE Human TGFbeta protein superfamily protein TGFbeta2.
 XX
 KW Human; TGFbeta; transforming growth factor beta; mutant; antagonist;
 KW agonist; ectopic bone formation; psoriasis; muscular atrophy; scar;
 KW formation; fibrosis; cirrhosis; osteopathic; antipsoriatic; antifibrotic;
 KW hepatotropic; vulnery; TGFbeta2.
 XX
 OS Homo sapiens.
 XX
 PN DE10026713-A1.
 XX
 PD 06-DEC-2001.
 XX
 PF 30-MAY-2000; 2000DE-01026713.
 XX
 PR 30-MAY-2000; 2000DE-01026713.
 XX
 PA (SEBA/) SEBALD W.
 XX
 PI Sebald W, Nickel J;
 XX
 DR WPI; 2002-042559/06.
 XX
 PT New mutetin of transforming growth factor-beta superfamily protein, useful
 PT for treating or preventing e.g. ectopic bone formation, competes for
 PT receptor binding.
 XX
 PS Example 1; Fig 1; 54pp; German.
 XX
 CC The present invention relates to mutetins of a chain of a protein which,
 CC when in the form of a homodimer, has antagonistic or partial agonistic
 CC activity, and where the mutation results in the protein binding with low
 CC affinity to its receptor. The protein is a member of the transforming
 CC growth factor beta (TGFbeta) superfamily. The mutant sequences of the
 CC invention can be used in the treatment of diseases associated with the
 CC overexpression of TGFbeta family proteins, including ectopic bone
 CC formation, psoriasis, muscular atrophy, scar formation, fibrosis and
 CC cirrhosis. The present sequence is the human TGFbeta2 protein
 XX
 SQ Sequence 112 AA;

CC cell growth such as liver cancer. The BMP polypeptides and
 CC polynucleotides are also useful for regulating nutritional partitioning,
 CC limiting weight gain, suppressing appetite, reducing fat mass, increasing
 CC the sensitivity of a cell to insulin or increasing glucose uptake by a
 CC cell. This sequence represents a human BMP polypeptide of the invention.

XX SQ Sequence 112 AA;

Query Match 100.0%; Score 163; DB 8; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQNCCLRLPLIYDFKRDLG 29
 DB 1 ALDAAFCFRNVQNCCLRLPLIYDFKRDLG 29

RESULT 25
 ABM79531
 ID ABM79531 standard; protein; 112 AA.

XX AC ABM79531;

XX DT 22-APR-2004 (first entry)

XX DE Human transforming growth factor beta2.

XX KW Human, TGF beta; transforming growth factor beta; antagonist;
 KW cutaneous wound; burn; wound healing; vulnerary; nephrotropic;
 KW ophthalmological; cytostatic; antiinflammatory; hepatotropic; cardiant.

XX OS Homo sapiens.

XX PN WO2003093293-A2.

XX PD 13-NOV-2003.

XX PF 15-APR-2003; 2003WO-US011437.

XX PR 29-APR-2002; 2002US-00135946.

XX PA (UYSL-) UNIV SAINT LOUIS.

XX PI Huang JS;

XX DR WPI; 2004-042374/04.

XX PT Inhibiting activity of transforming growth factor-beta useful for
 PT treating wounds, cancer or fibrosis, comprises administering composition
 PT comprising peptide antagonist of transforming growth factor-beta.

XX PS Disclosure; Fig 5A; Opp; English.

XX CC The present invention relates to a method of inhibiting activity of
 CC transforming growth factor-beta (TGF-beta), which comprises administering
 CC a composition comprising a non-naturally occurring peptide that binds to
 CC a TGF-beta receptor, blocks the TGF-beta receptor from binding naturally
 CC occurring TGF-beta and inhibits the activity of TGF-beta. The method can
 CC be used for reducing scarring due to wounds, such as burns, scrapes,
 CC puncture wounds and lacerations, promoting re-epithelialization of a
 CC wound, reducing the deposition of an extracellular matrix protein in the
 CC extracellular matrix and treating diseases mediated by TGF-beta activity,
 CC particularly glomerulonephritis, macular degeneration, intimal
 CC hyperplasia, cancer, fibrosis (e.g. scar formation, liver cirrhosis,
 CC kidney fibrosis, cystic fibrosis, lung fibrosis or heart fibrosis) and
 CC respiratory distress syndrome. The present sequence is the human TGF
 CC beta2 protein

XX SQ Sequence 112 AA;

Query Match 100.0%; Score 163; DB 8; Length 112;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQNCCLRLPLIYDFKRDLG 29
 DB 1 ALDAAFCFRNVQNCCLRLPLIYDFKRDLG 29

RESULT 26

AAB73205

ID AAB73205 standard; protein; 115 AA.

XX AC AAB73205;

XX DT 11-MAY-2001 (first entry)

XX DE TGF-beta2 C-terminal sequence.

XX KW Gene therapy; growth differentiation factor-8; GDF-8; AIDS; cachexia;
 KW neurodegenerative disease; amyotrophic lateral sclerosis; obesity;
 KW muscular dystrophy; musculodgenerative disease; tissue repair;
 KW muscle wasting disease; neuromuscular disorder; spinal cord injury;
 KW traumatic injury; congestive obstructive pulmonary disease.

XX OS Unidentified.

XX PN WO200112777-A2.

XX PD 22-FEB-2001.

XX PF 17-AUG-2000; 2000WO-US022884.

XX PR 19-AUG-1999; 99US-00378238.

XX PA (UYJO) UNIV JOHNS HOPKINS SCHOOL MEDICINE.

XX PI Lee S, Mcpherron AC;

XX DR WPI; 2001-211209/21.

XX PT New substantially purified growth differentiation factor-8 polypeptide,
 PT useful for treating muscle wasting disease, obesity, muscular dystrophy,
 PT neuromuscular disorder, acquired immunodeficiency syndrome and cachexia.

XX PS Example 2; Fig 3; 124pp; English.

XX CC The present invention relates to growth differentiation factor-8 (GDF-8)
 CC coding sequences and proteins. The present sequence is a protein, which
 CC was used in a sequence homology comparison with the GDF-8 protein
 CC isolated in the present invention. GDF-8 is useful for treating
 CC neurodegenerative diseases (e.g. amyotrophic lateral sclerosis and
 CC muscular dystrophy), musculodgenerative diseases or in tissue repair due
 CC to trauma, obesity and disorders related to abnormal proliferation of
 CC adipocytes. GDF-8 is also useful for treating malignancies of the various
 CC organ systems, particularly cells in muscle or adipose tissues and in
 CC gene therapy for the treatment of cell proliferative or immunological
 CC diseases mediated by GDF-8. In addition, GDF-8 is also useful for
 CC treating muscle wasting disease, neuromuscular disorder, spinal cord
 CC injury, traumatic injury, congestive obstructive pulmonary disease
 CC (COPD), AIDS or cachexia

XX SQ Sequence 115 AA;

Query Match 100.0%; Score 163; DB 4; Length 115;
 Best Local Similarity 100.0%; Pred. No. 3.1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQNCCLRLPLIYDFKRDLG 29
 DB 4 ALDAAFCFRNVQNCCLRLPLIYDFKRDLG 32

RESULT 27

ABG76034

ID ABG76034 standard; protein; 115 AA.

XX ABG76034;
 AC
 XX
 DT 30-APR-2003 (first entry)
 DE
 DE Human TGF-beta 2 C-terminus.
 XX
 XX GDF-5, growth differentiation factor 5; TGF-beta; human;
 KW transforming growth factor beta; skeletal development; endometriosis;
 KW cartilage differentiation; cell proliferative disease; uterine tumour;
 KW bone dysplasia; spondyloepiphyseal dysplasia; achondroplasia;
 KW dysplasia epiphysealis; metaphyseal dysostosis; hyperchondroplasia;
 KW enchondromatosis; hypophosphatasia; osteopetrosis; hyperphosphatasia;
 KW cranioepiphyseal dysplasia; osteogenesis imperfecta; transgenic;
 KW idiopathic osteoporosis; Engelman's disease; TGF beta-2.
 XX
 XX Homo sapiens.
 OS
 XX US2002165361-A1.
 XX
 XX 07-NOV-2002.
 XX
 XX 12-JUN-2001; 2001US-00880708.
 XX
 XX 12-JAN-1993; 93US-00003144.
 PR 12-JAN-1994; 94WO-US000657.
 PR 31-MAY-1995; 95US-00455559.
 PR 01-SEP-1998; 98US-00145060.
 XX
 XX (LEES/) LEE S.
 PA (HUYNH/) HUYNH T.
 XX
 XX Lee S, Huynh T;
 XX WPI; 2003-255226/25.
 XX
 XX New antibody specifically binding to a GDF-5 polypeptide, useful for
 PT diagnosing and treating cell proliferative disorders with aberrant GDF-5
 PT activity, such as endometriosis, uterine tumors and those involving
 PT skeletal tissues.
 XX
 XX Example 2; Fig 3A; 36pp; English.
 XX
 XX The invention relates to an antibody that specifically binds to growth
 CC differentiation factor-5 (GDF-5, a member of the TGF-beta (transforming
 CC growth factor beta) superfamily of proteins) polypeptide appearing as
 CC ABG76018. In order to determine the biological activity of GDF-5 in vivo,
 CC transgenic mice were constructed that express GDF-5 ectopically. Analysis
 CC of two independent transgenic mouse lines showed that these animals have
 CC ectopic bone formation with evident muscle tissue. This showed that GDF-5
 CC was capable of inducing bone formation in vivo. The antibody is useful
 CC for the diagnosis and treatment of cell proliferative disorders
 CC associated with aberrant GDF-5 activity, such as endometriosis, uterine
 CC tumors, those involving skeletal tissues, endometriosis, cartilage
 CC differentiation, cell proliferative disease, uterine tumour, bone
 CC dysplasia, spondyloepiphyseal dysplasia, achondroplasia, dysplasia
 CC epiphysealis, metaphyseal dysostosis, hyperchondroplasia,
 CC enchondromatosis, hypophosphatasia, osteopetrosis, hyperphosphatasia,
 CC cranioepiphyseal dysplasia, osteogenesis imperfecta, idiopathic
 CC osteoporosis and Engelman's disease. The present sequence represents a
 CC member of the TGFbeta superfamily used to determine regions of sequence
 CC similarity for design of degenerate primers for isolation of GDF-5
 XX
 XX Sequence 115 AA;
 PS
 Query Match 100.0%; Score 163; DB 6; Length 115;
 Best Local Similarity 100.0%; Pred. No. 3,1e-14;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ALDAAFCFRNVQDNCCLRPFLYIDFKRDLG 29
 DB 4 ALDAAFCFRNVQDNCCLRPFLYIDFKRDLG 32

RESULT 28
 ABUS2611.
 ID ABUS2611 standard; protein; 387 AA.
 XX
 AC ABUS2611;
 XX
 DT 04-MAR-2003 (first entry)
 DE Human NOVX protein, NOV18.
 XX
 XX Human; immunogen; NOVX; metabolic disorder; diabetes; cardiomyopathy;
 KW obesity; infectious disease; anorexia; neurodegenerative disorder;
 KW Alzheimer's disease; Parkinson's disease; immune disorder;
 KW haematopoietic disorder; dyslipidaemia; metabolic disturbance;
 KW metabolic syndrome X; wasting disorder; cancer; gene therapy; SNP;
 KW single nucleotide polymorphism.
 XX
 XX Homo sapiens.
 OS
 XX
 XX Key Location/Qualifiers
 PH Misc-difference 202
 FT /note= "May be Arg as a result of a single nucleotide
 FT polymorphism"
 XX
 XX WO200281518-A2.
 XX
 XX 17-OCT-2002.
 XX
 XX 21-FEB-2002; 2002WO-US005374.
 XX
 XX 21-FEB-2001; 2001US-0270220P.
 PR 21-FEB-2001; 2001US-0270523P.
 PR 23-FEB-2001; 2001US-0270797P.
 PR 23-FEB-2001; 2001US-0270810P.
 PR 08-MAR-2001; 2001US-0274295P.
 PR 16-MAR-2001; 2001US-0276400P.
 PR 16-MAR-2001; 2001US-0276677P.
 PR 26-MAR-2001; 2001US-0278796P.
 PR 04-APR-2001; 2001US-0281521P.
 PR 25-APR-2001; 2001US-0286548P.
 PR 17-MAY-2001; 2001US-0291765P.
 PR 10-AUG-2001; 2001US-0311595P.
 PR 13-AUG-2001; 2001US-0311980P.
 PR 10-SEP-2001; 2001US-0318526P.
 PR 17-SEP-2001; 2001US-0322712P.
 PR 18-OCT-2001; 2001US-0330307P.
 XX
 XX (CURA-) CURAGEN CORP.
 XX
 XX Pena CEA, Shimkets RA, Li L, Shenoy SG, Kekuda R, Spytek KA;
 PI Vernet CAM, Malyankar UL, Guo X, Gusev YV, Casman SJ, Boldog FL;
 PI Furtak K, Tchernev VT, Patturajan M, Gangolli EA, Padigari M, Liu X;
 PI Baumgartner JC, Gerlach VL, Spaderna SK, Zerhusen BD;
 XX
 XX WPI: 2003-046859/04.
 DR N-PSDB; ABX70666.
 XX
 XX New isolated NOVX polypeptide useful for treating cardiomyopathy,
 PT atherosclerosis, metabolic disorders, diabetes, obesity, infectious
 PT disease, anorexia, neurodegenerative disorders, Alzheimer's disease and
 PT cancer.
 XX
 XX Claim 1; Page 160; 479pp; English.
 PS
 XX
 XX The invention relates to an isolated polypeptide termed NOVX (NOV1, 2a,
 CC 2b, 3a, 3b, 4a, 4b, 5, 6, 7a-c, 8a-e, 9a-b, 10, 11, 12a-c, 13, 14, 15,
 CC 16a-d, 17a-b, 18, 19, 20a-b, 21-30) appearing as ABUS2578-ABUS2624), a
 CC variant of NOVX, a mature form of NOVX, and a variant of the mature form
 CC of NOVX. Also included are a nucleic acid molecule (NOVX NA) encoding
 CC NOVX, or a fragment or complement of NOVX NA, a vector comprising NOVX
 CC NA, a cell comprising the vector, an anti-NOVX antibody (ab), determining
 CC the presence or amount of NOVX or NOVX NA in a sample, and identifying an

CC agent that binds or modulates the expression or activity of NOVX. NOVX,
 CC NOVX NA or ab is useful for treating or preventing a NOVX-associated
 CC disorder in a subject, preferably human. Ab is useful for determining the
 CC presence or amount of NOVX in a sample. NOVX is useful for identifying an
 CC agent that binds to NOVX. NOVX, NOVX NA or ab is useful for treating
 CC metabolic disorders, diabetes, cardiomyopathy, obesity, infectious
 CC disease, anorexia, neurodegenerative disorders, Alzheimer's disease,
 CC Parkinson's disease, immune disorders, haematopoietic disorders, and
 CC various dyslipidaemias, metabolic disturbances associated with obesity,
 CC the metabolic syndrome X and wasting disorders associated with chronic
 CC diseases, various cancers, endocrine, connective tissue, blood, vascular,
 CC skin, renal, bone, brain, muscle disorders, or bacterial, fungal,
 CC protozoal or viral infections. NOVX, NOVX NA or ab is useful in screening
 CC assays, detection assays, predictive medicine, and in methods of
 CC treatment. NOVX is useful as immunogen, to screen for potential
 CC ant/agonist compounds, and as bait protein in a two-hybrid or three-
 CC hybrid assay. NOVX NA is useful in gene therapy, to express NOVX, to
 CC detect NOVX mRNA or a genetic lesion in a NOVX gene, and to modulate NOVX
 CC activity. The cell is useful for producing non-human transgenic animals.
 CC Ab is useful for isolating, and purifying NOVX and to monitor protein
 CC levels in tissue as part of a clinical testing procedure. The present
 CC sequence represents a NOVX protein
 CC
 CC SQ Sequence 387 AA;

Query Match 100.0%; Score 163; DB 6; Length 387;
 Best Local Similarity 100.0%; Pred. No. 1e-13;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQNCCLRPYIDFKRDLG 29
 |||||
 DB 276 ALDAAFCFRNVQNCCLRPYIDFKRDLG 304

RESULT 29

AAR20126
 ID AAR20126 standard; protein; 390 AA.

AC AAR20126;

XX 27-AUG-2003 (revised)
 DT 25-MAR-2003 (revised)
 DT 16-APR-1992 (first entry)

XX Sequence of hybrid transforming growth factor (TGF) beta-1/beta2.

XX Hypertension therapy; hypotensive agent; blood pressure modulator.

XX Platyrrhini.

OS Homo sapiens.

XX Key Location/Qualifiers
 FT Peptide 8..21
 FT Protein 280..391

XX WO9119513-A.

XX 26-DEC-1991.

XX 20-JUN-1990; 90US-00541221.

XX 20-JUN-1990; 90US-00541221.

XX (BRIM) BRISTOL-MYERS SQUIBB CO.

XX Oleson FB, Comeraki CR;

XX WPI; 1992-024199/03.

DR N-PSDB; AAQ20291.

XX Use of transforming growth factor (TGF)-beta and their antagonists - for
 PT modulating blood pressure, for treating hypertension and hypotension.
 CC

PS Disclosure; Fig 3; 42pp; English.

XX A new method for treating hypertension comprises administering a
 CC transforming growth factor (TGF)-beta to an individual at a dose
 CC effective for lowering blood pressure; the TGF-beta may be e.g. mature
 CC TGF-beta, TGF-beta2, a mature TGF-beta1/beta2 hybrid, TGF-beta1
 CC precursor, a latent TGF-beta2 precursor, hybrid TGF-beta1/TGF-beta2
 CC precursor, a latent TGF-beta1 complex or a latent TGF-beta2 complex.
 CC (Updated on 25-VAR-2003 to correct PA field.) (Updated on 27-AUG-2003 to
 CC correct OS field.)

XX SQ Sequence 390 AA;

Query Match 100.0%; Score 163; DB 2; Length 390;
 Best Local Similarity 100.0%; Pred. No. 1.1e-13;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQNCCLRPYIDFKRDLG 29
 |||||
 DB 279 ALDAAFCFRNVQNCCLRPYIDFKRDLG 307

RESULT 30

AAU77102

ID AAU77102 standard; protein; 413 AA.

XX AAU77102;

XX 05-JUN-2002 (first entry)

XX Human transforming growth factor beta 2 (TGF-beta-2) polypeptide.

XX Human; transforming growth factor beta; TGF-beta; insulin production;
 KW type I diabetes mellitus; pancreatic cell outgrowth; wound healing;
 KW pancreatic duct tissue; ischaemia; stroke; nervous system aging;
 KW neurological condition; neurodegenerative disease; inflammation;
 KW nasal injury; chemical injury; traumatic injury; tumour-induced injury;
 KW amyotrophic lateral sclerosis; spinocerebellar degeneration;
 KW immunological disease; multiple sclerosis; TGF-beta-2.

OS Homo sapiens.

XX Key Location/Qualifiers

FT Region 302..413

FT /note= "This region is specifically claimed"

XX WO200212336-A2.

XX 14-FEB-2002.

XX 09-FEB-2001; 2001WO-US004192.

XX 09-AUG-2000; 2000US-00635368.

XX (CURI-) CURIS INC.

XX Wang M, Pang X;

XX WPI; 2002-257468/30.

XX Treating a subject with a disorder resulting from insufficient insulin
 PT production, and inducing outgrowth of pancreatic cells, involves using a
 PT transforming growth factor beta therapeutic.
 CC

PS Claim 4; Fig 2; 77pp; English.

XX The invention relates to treating a subject with a disorder resulting
 CC from insufficient insulin production, involving contacting the subject
 CC with a transforming growth factor beta (TGF-beta) therapeutic. TGF-beta
 CC polypeptides can be used for treating a subject with a disorder resulting
 CC from insufficient insulin production, e.g. type I diabetes mellitus, and
 CC for inducing outgrowth of pancreatic cells associated with pancreatic
 CC duct tissue within a subject. A composition comprising a TGF-beta protein

CC may be useful in wound healing and treatment of neurological conditions
CC derived from acute, subacute or chronic injury to the nervous system,
CC including traumatic injury, chemical injury, vascular injury and deficits
CC (such as ischaemia resulting from stroke), together with
CC infectious/inflammatory and tumour-induced injury, aging of the nervous
CC system including Alzheimer's disease, chronic neurodegenerative diseases
CC including Parkinson's disease, Huntington's chorea, amyotrophic lateral
CC sclerosis, spinocerebellar degenerations and chronic immunological
CC diseases of the nervous system or affecting the nervous system, including
CC multiple sclerosis. This sequence represents the human TGF-beta-2 protein

XX
SQ Sequence 413 AA;
Query Match 100.0%; Score 163; DB 5; Length 413;
Best Local Similarity 100.0%; Pred. No. 1.1e-13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAYCFRNVDNCCRLRPLIYDFKRDLG 29
DB 302 ALDAAYCFRNVDNCCRLRPLIYDFKRDLG 330

RESULT 31
AAR83055
ID AAR83055 standard; protein; 414 AA.
XX AAR83055;
AC
XX
XX
DT 27-AUG-2003 (revised)
DT 25-JUN-1996 (first entry)
XX
DE Transforming growth factor-beta 2.
XX
KW macrophage inducible nitric oxide synthase; iNOS; constitutive NOS;
KW interleukin-1-beta; transforming growth factor-beta; TGF-beta; IL1-beta;
KW nitric oxide production; hypotension; inflammation; septic shock;
KW treatment.
XX
OS Mammalia.

XX
FH Key Location/Qualifiers
FT Protein 303..414
FT /note= "represents the mature active TGF beta-1 mol."
XX
XX W09526745-A1.
XX
PD 12-OCT-1995.
XX
XX 05-APR-1994; 94WO-US003705.
XX
XX 05-APR-1994; 94WO-US003705.
XX
XX (HARD) HARVARD COLLEGE.
XX
XX Lee M, Perrella MA;
XX
XX WPT; 1995-358443/46.
XX
XX N-PSDB; AAT05877.

XX
XX Treatment of hypotension, esp. in septic shock - by administering
XX transforming growth factor-beta e.g. to inhibit inducible nitric oxide
XX synthase gene transcription.
XX
XX Disclosure; Fig 18; 52pp; English.

XX
XX Transforming growth factor-beta 2 (TGF-beta 2) has been found to inhibit
XX inducible nitric oxide synthase (iNOS) gene transcription, esp. in
XX interleukin-1-beta (IL1-beta) stimulated rat smooth muscle cells, and at
XX a dose which does not inhibit constitutive NOS. TGF-beta 1 (AAR83054) or 2
XX or their active fragments (esp. derived from the carboxy-terminal 112
XX amino acids), can be used in the treatment of hypotension, such as that
XX associated with severe inflammation or septic shock. (Updated on 27-AUG-
XX 2003 to correct OS field.)

XX
SQ Sequence 414 AA;
Query Match 100.0%; Score 163; DB 2; Length 414;
Best Local Similarity 100.0%; Pred. No. 1.1e-13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAYCFRNVDNCCRLRPLIYDFKRDLG 29
DB 303 ALDAAYCFRNVDNCCRLRPLIYDFKRDLG 331

RESULT 32
AAR73597
ID AAR73597 standard; protein; 414 AA.
XX AAR73597;
AC
XX
XX
DT 25-MAR-2003 (revised)
DT 20-DEC-1995 (first entry)
XX
DE Human TGF-beta 2 protein.
XX
KW Transforming growth factor-beta; Human TGF-beta protein; TGF-beta 1;
KW TGF-beta 2; TGF-beta 3; osteogenic cell source; OCS; bone deficiency;
KW bone-inducing cofactor.

XX Homo sapiens.
XX
XX US5409896-A.
XX
XX 25-APR-1995.
XX
XX 12-NOV-1993; 93US-00132405.
XX
XX 01-SEP-1989; 89US-00401906.
XX
XX 12-NOV-1991; 91US-00790856.
XX
XX 18-MAY-1993; 93US-00063841.
XX
XX (GETH) GENENTECH INC.

XX
XX Rudman CG, Ammann AJ;
XX
XX WPI; 1995-169610/22.
XX
XX Compens. for treating skeletal tissue deficiency - comprising transforming
XX growth factor-beta and an osteogenic cell source in a carrier.
XX
XX Disclosure; Col 17-20; 19pp; English.

XX
XX This sequence represents human transforming growth factor-beta 2 (TGF-
XX beta 2). The sequences for human TGF-beta 1 (see AAR73596) and human TGF-
XX beta 3 (see AAR73598) are claimed within the scope of the invention. The
XX invention is a composition consisting of a TGF-beta protein and an
XX osteogenic cell source (OCS) formulated in an acceptable carrier other
XX than a bone morphogenic cofactor. This composition can be used for the
XX restoration of bone deficiency. This provides for the generation of a
XX mature bone only where it is required, without the inclusion of a
XX specific bone-inducing cofactor. This method can be used with any of the
XX 5 human TGF-beta's or with TGF-beta from other species. (Updated on 25-
XX MAR-2003 to correct PF field.)

XX
SQ Sequence 414 AA;
Query Match 100.0%; Score 163; DB 2; Length 414;
Best Local Similarity 100.0%; Pred. No. 1.1e-13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAYCFRNVDNCCRLRPLIYDFKRDLG 29
DB 303 ALDAAYCFRNVDNCCRLRPLIYDFKRDLG 331

Db 303 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 331

RESULT 35
ADJ75306
ID ADJ75306 standard; protein; 414 AA.

XX AC ADJ75306;
XX DT 20-MAY-2004 (first entry)
XX DE Marker gene related amino acid sequence SEQ ID NO:558.
XX DE
XX DE bronchial asthma; chronic obstructive pulmonary disease;
XX KW respiratory epithelial cell; interleukin-13; respiratory; antiasthmatic;
XX KW gene therapy; marker.
XX OS Homo sapiens.
XX FN EP1394274-A2.
XX PD 03-MAR-2004.
XX PF 04-AUG-2003; 2003EP-00254857.
XX PR 06-AUG-2002; 2002JP-00229312.
XX PR 20-MAR-2003; 2003JP-00077212.
XX PA (GENO-) GENOX RES INC.
XX PI Ohtani N, Sugita Y, Yamaya M, Kubo H, Nagai H, Izuhara K;
XX WPI; 2004-193155/19.
XX DT Testing for bronchial asthma or chronic obstructive pulmonary disease by
XX PT comparing the expression level of a marker gene in a biological sample
XX PT from a subject with the expression level of the gene in a sample from a
XX PT healthy subject.
XX PS Example 11; SEQ ID NO 558; 241pp; English.

The present invention describes a method of testing for bronchial asthma or chronic obstructive pulmonary disease. The method comprises determining the expression level of a marker gene in a biological sample from a subject, comparing the expression level determined with the expression level of the marker gene in a biological sample from a healthy subject, and judging whether the subject has bronchial asthma or chronic obstructive pulmonary disease. The marker gene comprises: (a) a group of genes (S1) whose expression levels increase when respiratory epithelial cells are stimulated with interleukin-13; or (b) a group of genes (S2) whose expression levels decrease when respiratory epithelial cells are stimulated with interleukin-13. Also described: (1) a reagent (I) for testing for bronchial asthma or chronic obstructive pulmonary disease; (2) a kit for screening for a candidate compound for a therapeutic agent to treat bronchial asthma or chronic obstructive pulmonary disease; (3) an animal model for bronchial asthma or chronic obstructive pulmonary disease; (4) an inducer that induces bronchial asthma in a mouse; (5) a method for producing an animal model for bronchial asthma or chronic obstructive pulmonary disease; (6) a therapeutic agent for bronchial asthma or chronic obstructive pulmonary disease, comprising the compound, the marker gene, or an antisense nucleic acid corresponding to a portion of the marker gene, a ribozyme, a polynucleotide that suppresses the expression of the gene through an RNAi effect or an antibody recognising a protein encoded by a marker gene; and (7) a DNA chip for testing for bronchial asthma or a chronic obstructive pulmonary disease, on which a probe has been immobilised to assay a marker gene. (1) has respiratory and antiasthmatic activities, and can be used in gene therapy. The method is useful for testing for or screening for a therapeutic agent for bronchial asthma or chronic obstructive pulmonary disease. The present sequence is used in the exemplification of the present invention.

XX SQ Sequence 414 AA;

Query Match 100.0%; Score 163; DB 8; Length 414;
Best Local Similarity 100.0%; Pred. No. 1,1e-13;
Matches: 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
DB 303 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 331

RESULT 36
ADQ17020
ID ADQ17020 standard; protein; 427 AA.
XX AC ADQ17020;
XX DT 09-SEP-2004 (first entry)
XX DE Murine TGF-beta2/N+5 FLAG fusion protein.
XX DE
XX DE Transforming growth factor-beta; TGF-beta; medical setting;
XX KW veterinary setting; cancer; immune disorder; wound healing;
XX KW atherosclerosis; hereditary haemorrhagic telangiectasia; protein therapy;
XX KW gene therapy; murine.
XX OS Mus musculus.
XX OS Synthetic.
XX FH Key
XX FT Peptide
XX FT /label= Signal_peptide
XX FT Protein
XX FT /note= "Murine TGF-beta2/N+5 FLAG mature fusion protein"
XX FT Region
XX FT /note= "Amino acid residues 1 to 5 of TGF-beta 2"
XX FT Region
XX FT /note= "FLAG tag peptide"
XX PN US6756215-B1.
XX PD 29-JUN-2004.
XX PF 19-OCT-2001; 2001US-00017372.
XX PR 20-OCT-2000; 2000US-0242292P.
XX PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX PI Wolfram LA, Letterio JJ;
XX WPI; 2004-477587/45.
XX DR N-PSDB; ADQ17019.
XX PT New functional transforming growth factor (TGF) beta family fusion
XX PT protein, useful for treating a disease that responds to administration of
XX PT a TGF-beta family protein and for prognosing and diagnosing disease
XX PT states such as cancer.
XX PS Example 5; SEQ ID NO 25; 71pp; English.

The invention relates to transforming growth factor-beta (TGF-beta) family fusion proteins that display substantial native TGF-beta family protein function while also having an additional functionality conveyed by the addition of a functionalising peptide domain (e.g. tag peptide). The fusion proteins are useful in medical and veterinary settings. They are useful for treating a disease that responds to administration of a TGF-beta family protein and for assessing a pharmacologic property of the protein. The functionalised TGF-beta fusion proteins are useful for detecting tagged ligand in transfected cells, for detecting of cell surface expression of TGF-beta receptor complexes by flow cytometry, and for measuring cell surface levels of receptor complexes in non-radioactive cross-linking assays. The tagged protein are useful for studying TGF-beta receptor expression levels in different tissues (e.g. of patients with cancer and immune disorders) or at different times (e.g.

CC after different clinical or experimental treatments). They are also
 CC useful for prognosing and diagnosing disease states such as cancer, sound
 CC healing, atherosclerosis and hereditary haemorrhagic telangiectasia, for
 CC testing possible drug or other therapeutic treatments, or other regimens
 CC that might (un)intentionally alter the expression level (or stability) of
 CC a TGF-beta receptor. The sequences of the invention are also useful in
 CC protein therapy and in gene therapy. The present sequence is murine TGF-
 CC beta2/N+5 FLAG fusion protein. This sequence is used in the
 CC exemplification of the invention.
 XX Sequence 427 AA;
 CC
 CC Query Match 100.0%; Score 163; DB 8; Length 427;
 CC Best Local Similarity 100.0%; Pred. No. 1.2e-13;
 CC Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
 CC 316 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 344
 CC
 CC RESULT 37
 CC ADQ17022
 CC ID ADQ17022 standard; protein; 431 AA.
 CC XX
 CC AC ADQ17022;
 CC XX
 CC DT 09-SEP-2004 (first entry)
 CC XX
 CC XX Murine TGF-beta2/N+5 HA fusion protein.
 CC XX
 CC XX Transforming growth factor-beta; TGF-beta; medical setting;
 CC XX veterinary setting; cancer; immune disorder; sound healing;
 CC XX atherosclerosis; hereditary haemorrhagic telangiectasia; protein therapy;
 CC XX gene therapy; murine; HA; haemagglutinin.
 CC XX
 CC OS Mus musculus.
 CC OS
 CC OS Synthetic.
 CC XX
 CC XX
 CC FH Key Location/Qualifiers
 CC FT Peptide 1..302
 CC FT /label= Signal_peptide
 CC FT Protein 303..431
 CC FT /note= "Murine TGF-beta2/N+5 HA mature fusion protein"
 CC FT Region 303..307
 CC FT /note= "Amino acid residues 1 to 5 of TGF-beta 2"
 CC FT Region 308..319
 CC FT /note= "HA tag peptide"
 CC FT
 CC XX US6756215-B1.
 CC XX
 CC XX 29-JUN-2004.
 CC XX
 CC XX 19-OCT-2001; 2001US-00017372.
 CC XX
 CC XX 20-OCT-2000; 2000US-0242292P.
 CC XX
 CC XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
 CC XX
 CC XX Wolfram LA, Letterio JJ;
 CC XX
 CC XX WPI; 2004-477587/45.
 CC DR N-PSDB; ADQ17021.
 CC XX
 CC XX New functional transforming growth factor (TGF) beta family fusion
 CC FT protein, useful for treating a disease that responds to administration of
 CC FT a TGF-beta family protein and for prognosing and diagnosing disease
 CC FT states such as cancer.
 CC XX
 CC XX Example 5; SEQ ID NO 27; 71pp; English.
 CC XX
 CC XX The invention relates to transforming growth factor-beta (TGF-beta)
 CC CC family fusion proteins that display substantial native TGF-beta family

CC by the addition of a functionalising peptide domain (e.g. tag peptide).
 CC The fusion proteins are useful in medical and veterinary settings. They
 CC are useful for treating a disease that responds to administration of a
 CC TGF-beta family protein and for assessing a pharmacologic property of a
 CC protein. The functionalised TGF-beta fusion proteins are useful for
 CC detecting tagged ligand in transfected cells, for detecting of cell
 CC surface expression of TGF-beta receptor complexes by flow cytometry, and
 CC for measuring cell surface levels of receptor complexes in non-
 CC radioactive cross-linking assays. The tagged protein are useful for
 CC studying TGF-beta receptor expression levels in different tissues (e.g.
 CC of patients with cancer and immune disorders) or at different times (e.g.
 CC after different clinical or experimental treatments). They are also
 CC useful for prognosing and diagnosing disease states such as cancer, sound
 CC healing, atherosclerosis and hereditary haemorrhagic telangiectasia, for
 CC testing possible drug or other therapeutic treatments, or other regimens
 CC that might (un)intentionally alter the expression level (or stability) of
 CC a TGF-beta receptor. The sequences of the invention are also useful in
 CC protein therapy and in gene therapy. The present sequence is murine TGF-
 CC beta2/N+5 HA fusion protein. This sequence is used in the exemplification
 CC of the invention.
 XX Sequence 431 AA;
 CC
 CC Query Match 100.0%; Score 163; DB 8; Length 431;
 CC Best Local Similarity 100.0%; Pred. No. 1.2e-13;
 CC Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
 CC 320 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 348
 CC
 CC RESULT 38
 CC AAP91899
 CC ID AAP91899 standard; protein; 442 AA.
 CC XX
 CC AC AAP91899;
 CC XX
 CC DT 25-MAR-2003 (revised)
 CC DT 23-DEC-1990 (first entry)
 CC XX
 CC XX Sequence encoded by human transforming growth factor (TGF) beta-2
 CC precursor 442 cDNA in pPC-21.
 CC XX Cell differentiation; cell proliferation.
 CC OS Homo sapiens.
 CC XX
 CC FH Key Location/Qualifiers
 CC FT Peptide 4..119
 CC FT /note= "Signal"
 CC FT Region 20..442
 CC FT /note= "Claimed"
 CC FT Cleavage-site 20..21
 CC FT Modified-site 72
 CC FT /note= "Potential glycosylation site"
 CC FT Region 116..144
 CC FT /note= "this entire SQ is replaced with Asn in simian TGF
 CC FT -beta-2-414"
 CC FT Modified-site 168
 CC FT /note= "Potential glycosylation site"
 CC FT Modified-site 269
 CC FT /note= "Potential glycosylation site"
 CC FT Protein 331..442
 CC XX DE3833897-A.
 CC XX
 CC XX 03-MAY-1989.
 CC XX
 CC XX 05-OCT-1988; 88DE-03833897.
 CC XX
 CC XX 06-OCT-1987; 87US-00106752.

PR 25-JAN-1988; 88US-00148267.
PR 18-AUG-1988; 88US-00234065.
XX
PA (ONCO) ONCOGEN.
XX
PI Purchio A, Madisen L, Webb N;
XX
DR WPI; 1989-138796/19.
DR N-PSDB; AAN90767.
XX
XX New DNA sequence encoding transforming growth factor beta 2 - used for
PT large scale expression in eucaryotic cells.
XX
PS Claim 4; Fig 1a; 27pp; German.
XX
CC PolyA-RNA was isolated from the tamoxifen-treated, human prostatic
CC adenocarcinoma line PC-3 and converted to cDNA. TGF DNA is pref. used for
CC control of the SV40 promoter, and expressed in CHO cells. The simian SQ
CC is also claimed. (Updated on 25-MAR-2003 to correct PR field.) (Updated
CC on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 442 AA;
Query Match 100.0%; Score 163; DB 1; Length 442;
Best Local Similarity 100.0%; Pred. No. 1.2e-13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
DB 331 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 359
RESULT 39
AAR05748
ID AAR05748 standard; protein; 442 AA.
XX
AC AAR05748;
XX
DT 25-MAR-2003 (revised)
DT 02-NOV-1990 (first entry)
XX
XX Human TGF-Beta2-442 precursor.
XX
XX Human TGF-Beta2 precursor; cancer; tumoricide; ss.
XX
XX Synthetic.
XX
FH Key Location/Qualifiers
FT Peptide 4..19
FT /label= Sinat peptide
FT Protein 331..442
XX
DN EP376785-A.
XX
PD 04-JUL-1990.
XX
XX 14-DEC-1989; 89EP-00403480.
XX
PR 16-DEC-1988; 88US-00285140.
PR 05-DEC-1989; 89US-00446020.
XX
XX (ONCO) ONCOGEN LP.
XX
XX Purchio AF, Madisen L, Webb N;
XX
XX WPI; 1990-203127/27.
DR N-PSDB; AAR05126.
XX
XX Cloning and expression of transforming growth factor beta 2 - used for
PT treatment of tumours or for augmenting wound healing.
XX
PS Claim 1; Fig 1a; 58pp; English.
XX

CC TGF-Beta2 may be used in treatment of tumors at effective doses, and may
CC also be useful in augmenting wound healing by stimulating cell
CC proliferation. The growth factor can be produced at high levels from a
CC CHO expression system. (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 442 AA;
Query Match 100.0%; Score 163; DB 2; Length 442;
Best Local Similarity 100.0%; Pred. No. 1.2e-13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
DB 331 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 359
RESULT 40
AAR20125
ID AAR20125 standard; protein; 442 AA.
XX
AC AAR20125;
XX
DT 25-MAR-2003 (revised)
DT 16-APR-1992 (first entry)
XX
XX Sequence of human transforming growth factor (TGF) beta-2-442.
XX Hypertension therapy; hypotensive agent; blood pressure modulator.
XX Homo sapiens.
XX Key Location/Qualifiers
FH Peptide 4..19
FT Protein 330..442
XX
PN WO9119513-A.
XX
PD 26-DEC-1991.
XX
PF 20-JUN-1990; 90US-00541221.
XX
PR 20-JUN-1990; 90US-00541221.
XX
XX (BRIM) BRISTOL-MYERS SQUIBB CO.
XX
XX Oleson FB, Comerdeski CR;
XX
XX WPI; 1992-024199/03.
DR N-PSDB; AAR20290.
XX
XX Use of transforming growth factor (TGF)-beta and their antagonists - for
PT modulating blood pressure, for treating hypertension and hypotension.
XX
XX Disclosure; Fig 2; 42pp; English.
XX
XX A new method for treating hypertension comprises administering a
CC transforming growth factor (TGF)-beta to an individual at a dose
CC effective for lowering blood pressure; the TGF-beta may be e.g. mature
CC TGF-beta, TGF-beta2, a mature TGF-beta1/beta2 hybrid, TGF-beta1
CC precursor, a latent TGF-beta2 precursor, hybrid TGF-beta1/TGF-beta2
CC precursor, a latent TGF-beta1 complex or a latent TGF-beta2 complex.
CC (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 442 AA;
Query Match 100.0%; Score 163; DB 2; Length 442;
Best Local Similarity 100.0%; Pred. No. 1.2e-13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
DB 331 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 359

```

RESULT 41
AAR79922
ID AAR79922 standard; protein; 442 AA.
AC AAR79922;
DT 25-MAR-2003 (revised)
DT 28-MAY-1996 (first entry)
XX
DE Human transforming growth factor-2.
XX
XX TGF-beta2; transforming growth factor; protein;
XX cell differentiation; cell proliferation; CHO; Chinese hamster; ovary;
XX COS; monkey kidney; animal; mammal.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 4..19
FT /note= "signal peptide"
FT Cleavage-site 20..21
FT /note= "putative signal sequence cleavage site"
FT Peptide 331..442
FT /note= "mature peptide"
XX
FN EP676474-A1.
XX
XX 11-OCT-1995.
XX
XX 14-DEC-1989; 95EP-00104223.
XX
XX 16-DEC-1988; 88US-00285140.
XX 05-DEC-1989; 89US-00446020.
XX
XX (ONCO ) ONCOGEN LP.
XX
XX Purchio AF, Madisen L, Webb N;
XX
XX WPI; 1995-346094/45.
XX N-PSDB; AAT04116.
XX
XX Hybrid transforming growth factor beta-1/TGF-beta-2 precursor - used to
XX produce biologically active, mature TGF-beta-2.
XX
XX Disclosure; Fig 1a; 52pp; English.
XX
XX This sequence is expressed in a host cell, preferably a COS or CHO cell,
XX so the host cell produces active TGF-beta2. The produced TGF-beta2
XX protein can be used to regulate cellular differentiation and
XX proliferation. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 442 AA;
Query Match 100.0%; Score 163; DB 2; Length 442;
Best Local Similarity 100.0%; Pred. No. 1.2e-13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 ALDAAVCFNRVQDNCCLRLPLYIDFKEDLG 29
DB 331 ALDAAVCFNRVQDNCCLRLPLYIDFKEDLG 359

RESULT 42
ADH11591
ID ADH11591 standard; protein; 442 AA.
XX
AC ADH11591;
XX
XX 11-MAR-2004 (first entry)
XX
XX Human bone morphogenic protein (BMP) polypeptide #17.
XX

```

```

KW Human; bone morphogenic protein; BMP; weight gain; appetite suppression;
KW fat mass reduction; cell sensitivity; glucose uptake; diabetes;
KW insulin resistance; hyperglycaemia; hypertension;
KW coronary artery disease; renal failure; neuropathy; metabolic disorder;
KW glucose metabolism disorder; endocrine disorder; obesity; weight loss;
KW liver disorder; cartilage growth disorder; bone growth disorder;
KW inflammation; aberrant cell growth; liver cancer.
XX
OS Homo sapiens.
XX
XX US2003224501-A1.
XX
XX 04-DEC-2003.
XX
XX 14-FEB-2003; 2003US-00366345.
XX
XX 17-MAR-2000; 2000US-0190067P.
XX 16-MAR-2001; 2001US-00809269.
XX 23-MAR-2001; 2001WO-US009229.
XX 17-JAN-2002; 2002US-0348621P.
XX 22-JAN-2002; 2002US-0349356P.
XX 28-JAN-2002; 2002US-0351520P.
XX 06-FEB-2002; 2002US-0354265P.
XX 15-FEB-2002; 2002US-0356749P.
XX 16-JAN-2003; 2003US-00345236.
XX
XX (YOUNG) YOUNG P E.
XX (RUBE) RUBEN S M.
XX
XX Young PE, Ruben SM;
XX
XX WPI; 2004-022075/02.
XX N-PSDB; ADH11568.
XX
XX New bone morphogenic protein polypeptides and polynucleotides, useful for
XX diagnosing, preventing, treating or ameliorating a medical condition,
XX e.g. diabetes, dyslipidemia, hypertension, coronary artery disease or
XX neuropathy.
XX
XX Claim 1; SEQ ID NO 47; 224pp; English.
XX
XX The invention relates to human bone morphogenic protein (BMP)
XX polypeptides and the polynucleotides encoding them. The invention also
XX relates to a method for limiting weight gain, suppressing appetite or
XX reducing fat mass, comprising administering to a mammalian subject a
XX therapeutic amount of a BMP polypeptide, and a method for increasing the
XX sensitivity of a cell to insulin or increasing glucose uptake by a cell,
XX comprising contacting the cell with a BMP polypeptide. The BMP
XX polypeptides and polynucleotides are useful for diagnosing a pathological
XX condition or a susceptibility to a pathological condition in a subject or
XX for preventing, treating or ameliorating a medical condition, e.g.
XX diabetes, insulin resistance, hyperglycaemia, hypertension, coronary
XX artery disease, renal failure, neuropathy, metabolic disorders, glucose
XX metabolism disorder, endocrine disorders, obesity, weight loss, liver
XX disorders, cartilage and bone growth disorders, inflammation or aberrant
XX cell growth such as liver cancer; the BMP polypeptides and
XX polynucleotides are also useful for regulating nutritional partitioning,
XX limiting weight gain, suppressing appetite, reducing fat mass, increasing
XX the sensitivity of a cell to insulin or increasing glucose uptake by a
XX cell. This sequence represents a human BMP polypeptide of the invention.
XX
SQ Sequence 442 AA;
Query Match 100.0%; Score 163; DB 8; Length 442;
Best Local Similarity 100.0%; Pred. No. 1.2e-13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 ALDAAVCFNRVQDNCCLRLPLYIDFKEDLG 29
DB 331 ALDAAVCFNRVQDNCCLRLPLYIDFKEDLG 359

Search completed: October 31, 2004, 14:28:36

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Job time : 73 secs

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OM protein - protein search, using sw model

Run on: October 31, 2004, 14:08:37 ; Search time 25 Seconds
(without alignments)
76.929 Million cell updates/sec

Title: US-09-822-873-1

Perfect score: 163

Sequence: 1 ALDAAYCFRNVDNCCRLPLYIDFKRDLG 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 46

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 100%

Maximum Match 100%

Listing first 500 summaries

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- 2: /cgn2_6/prodata/1/iaa/5B_COMB.pep.*
- 3: /cgn2_6/prodata/1/iaa/5A_COMB.pep.*
- 4: /cgn2_6/prodata/1/iaa/5B_COMB.pep.*
- 5: /cgn2_6/prodata/1/iaa/5A_COMB.pep.*
- 6: /cgn2_6/prodata/1/iaa/5B_COMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	163	100.0	60	3	US-09-363-939A-123
2	163	100.0	60	4	US-09-791-301-123
3	163	100.0	70	4	US-09-848-664A-10
4	163	100.0	112	1	US-07-979-441-2
5	163	100.0	112	1	US-08-486-057B-42
6	163	100.0	112	1	US-08-470-837-32
7	163	100.0	112	2	US-08-789-588-42
8	163	100.0	112	3	US-08-691-794-5
9	163	100.0	112	3	US-09-123-233-4
10	163	100.0	112	3	US-09-123-233-10
11	163	100.0	112	3	US-08-927-433-3
12	163	100.0	112	3	US-08-868-452-32
13	163	100.0	112	4	US-09-095-637D-2
14	163	100.0	114	1	US-08-481-377-24
15	163	100.0	114	2	US-08-491-835-22
16	163	100.0	114	3	US-09-153-733A-24
17	163	100.0	114	3	US-08-946-092A-22
18	163	100.0	114	3	US-09-172-062-22
19	163	100.0	114	3	US-08-624-635-23
20	163	100.0	114	3	US-09-301-520D-22
21	163	100.0	114	3	US-09-389-705-24
22	163	100.0	114	5	PCT-US94-00665-24
23	163	100.0	114	5	PCT-US94-00685-22
24	163	100.0	115	1	US-08-581-529B-20
25	163	100.0	115	1	US-08-455-559-26
26	163	100.0	115	2	US-08-525-596B-30
27	163	100.0	115	2	US-08-581-528A-20

28	163	100.0	115	3	US-09-097-616-20	Sequence 20, Appl
29	163	100.0	115	3	US-09-177-860A-30	Sequence 30, Appl
30	163	100.0	115	3	US-09-145-060-26	Sequence 26, Appl
31	163	100.0	115	4	US-09-378-238-40	Sequence 40, Appl
32	163	100.0	115	4	US-09-629-938-30	Sequence 30, Appl
33	163	100.0	115	4	US-09-686-344-48	Sequence 48, Appl
34	163	100.0	115	4	US-09-412-791D-20	Sequence 20, Appl
35	163	100.0	115	4	US-09-061-061-20	Sequence 20, Appl
36	163	100.0	115	5	PCT-US94-00657-26	Sequence 26, Appl
37	163	100.0	115	5	PCT-US94-07762-20	Sequence 20, Appl
38	163	100.0	115	5	PCT-US94-07799-20	Sequence 20, Appl
39	163	100.0	414	1	US-08-132-405-2	Sequence 2, Appl
40	163	100.0	414	1	US-08-395-939A-2	Sequence 2, Appl
41	163	100.0	414	5	PCT-US91-01861-2	Sequence 2, Appl
42	163	100.0	414	5	PCT-US94-03705-6	Sequence 6, Appl
43	163	100.0	414	6	5221620-4	Patent No. 5221620
44	163	100.0	427	4	US-10-017-372E-25	Sequence 25, Appl
45	163	100.0	431	4	US-10-017-372E-27	Sequence 27, Appl
46	163	100.0	442	6	5221620-2	Patent No. 5221620

ALIGNMENTS

RESULT 1
US-09-363-939A-123
; Sequence 123, Application US/09363939A
; Patent No. 6346611
; GENERAL INFORMATION:
; APPLICANT: Pagratis, Nikos
; APPLICANT: Lochrie, Michael
; APPLICANT: Gold, Larry
; TITLE OF INVENTION: High Affinity TGFbeta Nucleic Acid Ligands and
; FILE REFERENCE: INHIBITORS
; CURRENT APPLICATION NUMBER: US/09/363,939A
; CURRENT FILING DATE: 1999-07-29
; PRIOR APPLICATION NUMBER: 09/046,247
; PRIOR FILING DATE: 1998-03-23
; PRIOR APPLICATION NUMBER: 08/458,424
; PRIOR FILING DATE: 1995-06-02
; PRIOR APPLICATION NUMBER: 07/714,131
; PRIOR FILING DATE: 1991-06-10
; PRIOR APPLICATION NUMBER: 07/931,473
; PRIOR FILING DATE: 1992-08-17
; PRIOR APPLICATION NUMBER: 07/964,624
; PRIOR FILING DATE: 1992-10-21
; PRIOR APPLICATION NUMBER: 08/117,991
; PRIOR FILING DATE: 1993-09-08
; PRIOR APPLICATION NUMBER: 07/536,428
; PRIOR FILING DATE: 1990-06-11
; NUMBER OF SEQ ID NOS: 216
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 123
; LENGTH: 60
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-363-939A-123

Query Match 100.0%; Score 163; DB 3; Length 60;

Best Local Similarity 100.0%; Pred. No. 3.7e-15;

Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCRLPLYIDFKRDLG 29

DB 1 ALDAAYCFRNVDNCCRLPLYIDFKRDLG 29

RESULT 2

US-09-791-301-123

Sequence 123, Application US/09791301
Patent No. 6713616
GENERAL INFORMATION:
APPLICANT: Pagratias, Nikos
APPLICANT: Lochrie, Michael
APPLICANT: Gold, Larry
TITLE OF INVENTION: High Affinity TGF-beta Nucleic Acid Ligands and Inhibitors
FILE REFERENCE: NEX 87/C
CURRENT APPLICATION NUMBER: US/09/791,301
CURRENT FILING DATE: 2001-02-23
PRIOR APPLICATION NUMBER: 09/046,247
PRIOR FILING DATE: 1998-03-23
PRIOR APPLICATION NUMBER: 08/458,424
PRIOR FILING DATE: 1995-06-02
PRIOR APPLICATION NUMBER: 07/714,131
PRIOR FILING DATE: 1991-06-10
PRIOR APPLICATION NUMBER: 07/931,473
PRIOR FILING DATE: 1992-08-17
PRIOR APPLICATION NUMBER: 07/964,624
PRIOR FILING DATE: 1992-10-21
PRIOR APPLICATION NUMBER: 08/117,991
PRIOR FILING DATE: 1993-09-08
PRIOR APPLICATION NUMBER: 07/536,428
PRIOR FILING DATE: 1990-06-11
PRIOR APPLICATION NUMBER: 09/363,939
PRIOR FILING DATE: 1999-07-29
NUMBER OF SEQ ID NOS: 216
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 123
LENGTH: 60
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-791-301-123

Query Match 100.0%; Score 163; DB 4; Length 60;
Best Local Similarity 100.0%; Pred. No. 3.7e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 3
US-09-848-664A-10
Sequence 10, Application US/09848664A
Patent No. 6723344
GENERAL INFORMATION:
APPLICANT: Sakiyama-Elbert, Shelly E.
APPLICANT: Hubbell, Jeffrey A.
TITLE OF INVENTION: Controlled Release of No. 6723344-Heparin Binding Growth Factors from Heparin Containing Matrices
FILE REFERENCE: ETH 108
CURRENT APPLICATION NUMBER: US/09/848,664A
CURRENT FILING DATE: 2001-05-03
PRIOR APPLICATION NUMBER: US/09/298,084A
PRIOR FILING DATE: 1999-04-22
NUMBER OF SEQ ID NOS: 31
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 10
LENGTH: 70
TYPE: PRT
ORGANISM: Homo sapiens
US-09-848-664A-10

Query Match 100.0%; Score 163; DB 4; Length 70;
Best Local Similarity 100.0%; Pred. No. 4.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 4
US-07-979-441-2
Sequence 2, Application US/07979441
Patent No. 5462925
GENERAL INFORMATION:
APPLICANT: OGAWA, YASUSHI
APPLICANT: SCHMIDT, DAVID
APPLICANT: DASCH, JAMES
TITLE OF INVENTION: NOVEL BETA-TYPE TRANSFORMING GROWTH FACTOR
TITLE OF INVENTION: FACTOR
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Morrison & Foerster
STREET: 755 Page Mill Road
CITY: Palo Alto
STATE: California
COUNTRY: USA
ZIP: 94304-1018
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/979,441
FILING DATE: 19921120
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/614,306
FILING DATE: 16-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: CIOTTI, THOMAS E.
REGISTRATION NUMBER: 21,013
REFERENCE/DOCKET NUMBER: 220952024800
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-813-5600
TELEFAX: 415-494-0792
TELEX: 706141
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 112 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
US-07-979-441-2

Query Match 100.0%; Score 163; DB 1; Length 112;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 1 ALDAAFCFRNVQDNCCLRLPLYIDFKRDLG 29

RESULT 5
US-08-486-057B-42
Sequence 42, Application US/08486057B
Patent No. 5650494
GENERAL INFORMATION:
APPLICANT: Cerletti, Nico
APPLICANT: McMaster, Gary K.
APPLICANT: Cox, David
APPLICANT: Schmitz, Albert
APPLICANT: Meyhack, Bernd
TITLE OF INVENTION: Process for Refolding Recombinantly Produced TGF-beta-like Proteins
TITLE OF INVENTION: Produced TGF-beta-like Proteins
NUMBER OF SEQUENCES: 43

;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Henry P. No. 5650494ak
;; STREET: 520 White Plains Road, P.O. Box 2005
;; CITY: Tarrytown
;; STATE: New York
;; COUNTRY: U.S.A.
;; ZIP: 10591-9005
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: Patentin Release #1.0, Version #1.30
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/486,057B
;; FILING DATE: 07-JUN-1995
;; CLASSIFICATION: 514
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 06/201,703
;; FILING DATE: 25-FEB-1994
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 07/960,309
;; FILING DATE: 13-OCT-1992
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US 07/621,502
;; FILING DATE: 03-DEC-1990
;; APPLICATION DATA: GB 8927546.5
;; FILING DATE: 06-DEC-1989
;; ATTORNEY/AGENT INFORMATION:
;; NAME: No. 5650494ak, Henry P.
;; REGISTRATION NUMBER: 33200
;; REFERENCE/DOCKET NUMBER: 4-17861/+Cont3
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (908) 277-5110
;; TELEFAX: (908) 277-4306
;; INFORMATION FOR SEQ ID NO: 42:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 112 amino acids
;; TYPE: amino acid
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
;; US-08-486-057B-42

Query Match 100.0%; Score 163; DB 1; Length 112;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
|||
Db 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

RESULT 6
US-08-470-837-32
; Sequence 32, Application US/08470837
; Patent No. 5800811
; GENERAL INFORMATION:
; APPLICANT: Nimni, Marcel E.
; APPLICANT: Hall, Frederick L.
; APPLICANT: Tuan, Tai-Lan
; APPLICANT: Wu, Lingtao
; APPLICANT: Cheung, David T.
; TITLE OF INVENTION: Transforming Growth Factor B Fusion
; TITLE OF INVENTION: and
; TITLE OF INVENTION: Their Use in Wound Healing
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 11150 Santa Monica Boulevard, Suite 400
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90025-3395

;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: Patentin Release #1.0, Version #1.30
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/470,837
;; FILING DATE:
;; CLASSIFICATION: 424
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Sharp, Janice A.
;; REGISTRATION NUMBER: 34,051
;; REFERENCE/DOCKET NUMBER: 30630-1US01
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 310-445-1140
;; TELEFAX: 310-445-9031
;; INFORMATION FOR SEQ ID NO: 32:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 112 amino acids
;; TYPE: amino acid
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
;; US-08-470-837-32

Query Match 100.0%; Score 163; DB 1; Length 112;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29
|||
Db 1 ALDAAYCFRNVDNCCLRPLYIDFKRDLG 29

RESULT 7
US-08-789-588-42
; Sequence 42, Application US/08789588
; Patent No. 5922846
; GENERAL INFORMATION:
; APPLICANT: Cerletti, Nico
; APPLICANT: McMaster, Gary K.
; APPLICANT: Cox, David
; APPLICANT: Schmitz, Albert
; APPLICANT: Meyhack, Bernd
; TITLE OF INVENTION: Process for Refolding Recombinantly
; TITLE OF INVENTION: Produced TGF-beta-like Proteins
; NUMBER OF SEQUENCES: 43
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Henry P. No. 5922846ak
; STREET: 520 White Plains Road, P.O. Box 2005
; CITY: Tarrytown
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10591-9005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/789,588
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/486,057
; FILING DATE: 07-JUN-1995
; APPLICATION NUMBER: US 08/201,703
; FILING DATE: 25-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/960,309
; FILING DATE: 13-OCT-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/621,502
; FILING DATE: 03-DEC-1990

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 112 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
US-08-691-794-5

Query Match      100.0%; Score 163; DB 3; Length 112;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 29
Db 1 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 29

RESULT 9
US-09-123-233-4
; Sequence 4, Application US/09123233
; Patent No. 6057430
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: No. 6057430el process for the production of
; TITLE OF INVENTION: biologically active dimeric protein
; NUMBER OF SEQUENCES: 14
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/123,233
; FILING DATE:
; CLASSIFICATION: 530
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 112 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-123-233-4

Query Match      100.0%; Score 163; DB 3; Length 112;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 29
Db 1 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 29

RESULT 10
US-09-123-233-10
; Sequence 10, Application US/09123233
; Patent No. 6057430
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: No. 6057430el process for the production of
; TITLE OF INVENTION: biologically active dimeric protein
; NUMBER OF SEQUENCES: 14
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/123,233
; FILING DATE:
; CLASSIFICATION: 530
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 112 amino acids

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; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-123-233-10

Query Match      100.0%; Score 163; DB 3; Length 112;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
  |||||
Db 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29

RESULT 11
US-08-927-433-3
; Sequence 3, Application US/08927433
; Patent No. 6107476
; GENERAL INFORMATION:
; APPLICANT: Brlander, Mark G.
; APPLICANT: Huang, Shaoming
; APPLICANT: Jackson, Michael A.
; APPLICANT: Peterson, Per A.
; TITLE OF INVENTION: PROTEIN GROWTH FACTOR FOR TREATING PROSTATE CANCER, AND RELATED
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Johnson & Johnson
; STREET: One J & J Plaza
; CITY: New Brunswick
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 08933
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/927,433
; FILING DATE:
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Morrison, Alan J.
; REGISTRATION NUMBER: 37,399
; REFERENCE/DOCKET NUMBER: ORT-849
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 732-524-3592
; TELEFAX: 732-524-2808
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 112 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-927-433-3

Query Match      100.0%; Score 163; DB 3; Length 112;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
  |||||
Db 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29

RESULT 12
US-08-868-452-32
; Sequence 32, Application US/08868452C
; Patent No. 6352972
; GENERAL INFORMATION:
; APPLICANT: Marcel E. Nimmi
; APPLICANT: Frederick L. Hall
```

```
; APPLICANT: Lingtao Wu
; APPLICANT: Bo Han
; APPLICANT: Edwin Shors
; TITLE OF INVENTION: BONE MORPHOGENETIC PROTEINS AND THEIR
; FILE REFERENCE: 17972-11
; CURRENT APPLICATION NUMBER: US/08/868,452C
; CURRENT FILING DATE: 1997-06-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 32
; LENGTH: 112
; TYPE: PRT
; ORGANISM: Human
US-08-868-452-32

Query Match      100.0%; Score 163; DB 3; Length 112;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
  |||||
Db 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29

RESULT 13
US-09-095-637D-2
; Sequence 2, Application US/09095637D
; Patent No. 6500920
; GENERAL INFORMATION:
; APPLICANT: HUANG, Jung S.
; TITLE OF INVENTION: AN INHIBITOR OF TRANSFORMING GROWTH FACTOR BETA AND A
; TITLE OF INVENTION: METHOD OF INHIBITING THE BIOLOGICAL EFFECTS OF
; FILE REFERENCE: 16153-1637
; CURRENT APPLICATION NUMBER: US/09/095,637D
; CURRENT FILING DATE: 1998-06-11
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 2
; LENGTH: 112
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-095-637D-2

Query Match      100.0%; Score 163; DB 4; Length 112;
Best Local Similarity 100.0%; Pred. No. 7.1e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
  |||||
Db 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29

RESULT 14
US-08-481-377-24
; Sequence 24, Application US/08481377
; Patent No. 5808007
; GENERAL INFORMATION:
; APPLICANT: JOHNS HOPKINS UNIVERSITY
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
; NUMBER OF SEQUENCES: 29
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
; STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
; CITY: LOS ANGELES
; STATE: CALIFORNIA
; COUNTRY: US
; ZIP: 90067
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
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;; SOFTWARE: PatentIn Release #1.0, Version #1.25
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/481,377
;; FILING DATE:
;; CLASSIFICATION: 514
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: PCT/US94/00666
;; FILING DATE: 12-JAN-1994
;; ATTORNEY/AGENT INFORMATION:
;; NAME: WETHERELL, JR. Ph.D., JOHN R.
;; REGISTRATION NUMBER: 31,678
;; REFERENCE/DOCKET NUMBER: FD2279 PCT
;; TELEPHONE: (619) 455-5100
;; TELEFAX: (619) 455-5110
;; INFORMATION FOR SEQ ID NO: 24:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 114 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
;; IMMEDIATE SOURCE:
;; CLONE: TGF-beta 2
;; NAME/KEY: Protein
;; LOCATION: 1..114
;; US-08-481-377-24

Query Match 100.0%; Score 163; DB 1; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAVCFRNVQDNCCLRPYIDFKRDLG 29
Db 3 ALDAAVCFRNVQDNCCLRPYIDFKRDLG 31

RESULT 15
US-08-491-835-22
; Sequence 22, Application US/08491835
; Patent No. 5821056
; GENERAL INFORMATION:
; APPLICANT: THE JOHNS HOPKINS UNIVERSITY
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Spensley Horn Juba & Lubitz
; STREET: 1880 Century Park East, Suite 500
; CITY: Los Angeles
; STATE: California
; COUNTRY: US
; ZIP: 90067
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; FILING DATE: 23-OCT-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/00685
; FILING DATE: 12-JAN-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Wetherell, Jr. Ph.D., John R.
; REGISTRATION NUMBER: 31,678
; REFERENCE/DOCKET NUMBER: FD3288
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 455-5100
; TELEFAX: (619) 455-5110
; INFORMATION FOR SEQ ID NO: 22:
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;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 114 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
;; IMMEDIATE SOURCE:
;; CLONE: TGF-beta 2
;; NAME/KEY: Protein
;; LOCATION: 1..114
;; US-08-491-835-22

Query Match 100.0%; Score 163; DB 2; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAVCFRNVQDNCCLRPYIDFKRDLG 29
Db 3 ALDAAVCFRNVQDNCCLRPYIDFKRDLG 31

RESULT 16
US-09-153-733A-24
; Sequence 24, Application US/09153733A
; Patent No. 6025475
; GENERAL INFORMATION:
; APPLICANT: JOHNS HOPKINS UNIVERSITY
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
; NUMBER OF SEQUENCES: 29
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
; STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
; CITY: LOS ANGELES
; STATE: CALIFORNIA
; COUNTRY: US
; ZIP: 90067
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/153,733A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/481,377
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: WETHERELL, JR. Ph.D., JOHN R.
; REGISTRATION NUMBER: 31,678
; REFERENCE/DOCKET NUMBER: FD2279 PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 455-5100
; TELEFAX: (619) 455-5110
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 114 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; IMMEDIATE SOURCE:
; CLONE: TGF-beta 2
; NAME/KEY: Protein
; LOCATION: 1..114
; US-09-153-733A-24

Query Match 100.0%; Score 163; DB 3; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
DB 3 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 31

RESULT 17
US-08-946-092A-22
; Sequence 22, Application US/08946092A
; Patent No. 6030617
; GENERAL INFORMATION:
; APPLICANT: THE JOHNS HOPKINS UNIVERSITY
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Spensley Horn Jubas & Lubitz
; STREET: 1880 Century Park East, Suite 500
; CITY: Los Angeles
; STATE: California
; COUNTRY: US
; ZIP: 90067
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/946,092A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/491,835
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Wetherell, Jr. Ph.D., John R.
; REGISTRATION NUMBER: 31,678
; REFERENCE/DOCKET NUMBER: FD3288
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 455-5110
; TELEFAX: (619) 455-5110
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 114 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; IMMEDIATE SOURCE:
; CLONE: TGF-beta2
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..114
; US-08-946-092A-22

Query Match 100.0%; Score 163; DB 3; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
DB 3 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 31

RESULT 18
US-09-172-062-22
; Sequence 22, Application US/09172062
; Patent No. 6191261
; GENERAL INFORMATION:
; APPLICANT: THE JOHNS HOPKINS UNIVERSITY
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Spensley Horn Jubas & Lubitz

STREET: 1880 Century Park East, Suite 500
CITY: Los Angeles
STATE: California
COUNTRY: US
ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/172,062
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/491,835
FILING DATE: 23-OCT-1995
APPLICATION NUMBER: PCT/US94/00685
FILING DATE: 12-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr. Ph.D., John R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD3288
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 114 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..114
US-09-172-062-22

Query Match 100.0%; Score 163; DB 3; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
DB 3 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 31

RESULT 19
US-08-624-635-23
; Sequence 23, Application US/08624635
; Patent No. 6204047
; GENERAL INFORMATION:
; APPLICANT: Lee, Se-Jin
; APPLICANT: Cunningham, No. 6204047een
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-10
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Spensley Horn Jubas & Lubitz
; STREET: 1880 Century Park East, Suite 500
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90067
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/624,635
; FILING DATE: 16-AUG-1996

Patent No. 6391565
GENERAL INFORMATION:
APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
STATE: CALIFORNIA
COUNTRY: US
ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/153,733
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: PD2279 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 114 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta 2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..114
SEQUENCE DESCRIPTION: SEQ ID NO: 24:
US-09-389-705-24
Query Match 100.0%; Score 163; DB 3; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAACFRNVQDNCCLRLPLVDFKRDIG 29
DB 3 ALDAAACFRNVQDNCCLRLPLVDFKRDIG 31
RESULT 22
PCT-US94-00666-24
Sequence 24, Application PC/TUS9400666
GENERAL INFORMATION:
APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
STATE: CALIFORNIA
COUNTRY: US
ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

Prior Application: 536
APPLICATION NUMBER: US 08/134,078
FILING DATE: 08-OCT-1993
ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr., Ph.D., John R.,
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: PD-3054
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 114 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..114
US-08-624-635-23
Query Match 100.0%; Score 163; DB 3; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAACFRNVQDNCCLRLPLVDFKRDIG 29
DB 3 ALDAAACFRNVQDNCCLRLPLVDFKRDIG 31
RESULT 20
US-09-301-520D-22
Sequence 22, Application US/09301520D
Patent No. 6365402
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
FILE REFERENCE: JH1190-3
CURRENT FILING DATE: 1999-04-28
PRIOR APPLICATION NUMBER: US/09/301,520D
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
NUMBER OF SEQ ID NOS: 28
SOFTWARE: PatentIn version 3.0
SEQ ID NO 22
LENGTH: 114
TYPE: PRT
ORGANISM: Homo sapiens
US-09-301-520D-22
Query Match 100.0%; Score 163; DB 3; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAACFRNVQDNCCLRLPLVDFKRDIG 29
DB 3 ALDAAACFRNVQDNCCLRLPLVDFKRDIG 31
RESULT 21
US-09-389-705-24
Sequence 24, Application US/09389705

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SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/00666
FILING DATE: 12-JAN-1994
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 114 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta 2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..114
PCT-US94-00666-24
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Query Match 100.0%; Score 163; DB 5; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 1 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 3 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 31
```

```
RESULT 23
PCT-US94-00685-22
Sequence 22, Application PC/TUS9400685
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East, Suite 500
CITY: Los Angeles
STATE: California
COUNTRY: US
ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/00685
FILING DATE: 12-JAN-1994
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr. Ph.D., John R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD3288
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 114 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
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CLONE: TGF-beta2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..114
PCT-US94-00685-22
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```
Query Match 100.0%; Score 163; DB 5; Length 114;
Best Local Similarity 100.0%; Pred. No. 7.2e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 1 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 3 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 31
```

```
RESULT 24
US-08-581-529B-20
Sequence 20, Application US/08581529B
Patent No. 5770444
GENERAL INFORMATION:
APPLICANT: Lee, Se-Jin
APPLICANT: Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
STATE: California
COUNTRY: USA
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/581,529B
FILING DATE: 15-APR-1996
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/082001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 678-5070
TELEFAX: (619) 678-5099
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115
US-08-581-529B-20
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```
Query Match 100.0%; Score 163; DB 1; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
QY 1 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 4 ALDAAAYCFRNVQDNCCLRLPLYIDFKRDLG 32
```

```
RESULT 25
US-08-455-559-26
Sequence 26, Application US/08455559
```

Patent No. 5801014
GENERAL INFORMATION:
APPLICANT: LEE, SE-JIN
APPLICANT: HUYNH, THANH
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-5
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JURAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
STATE: CALIFORNIA
COUNTRY: US
ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/455,559
FILING DATE: 31-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/003,144
FILING DATE: 12-JAN-1993
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. PH.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: PD2280
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/455-5100
TELEFAX: 619-455-5110
INFORMATION FOR SEQ ID NO: 26:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115
US-08-455-559-26

Query Match 100.0%; Score 163; DB 1; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPYIDFKRDLG 29
Db 4 ALDAAFCFRNVQDNCCLRLPYIDFKRDLG 32

RESULT 26
US-08-525-596B-30
Sequence 30, Application US/08525596B
Patent No. 5827733
GENERAL INFORMATION:
APPLICANT: Huynh, Thanh
APPLICANT: Lee, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
STATE: CA
COUNTRY: US
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/525,596B
FILING DATE: 19-SEP-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/07762
FILING DATE: 08-JUL-1994
ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr., Ph.D., John R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: 07265/075001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-678-5070
TELEFAX: 619-678-5099
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115
US-08-525-596B-30

Query Match 100.0%; Score 163; DB 2; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAFCFRNVQDNCCLRLPYIDFKRDLG 29
Db 4 ALDAAFCFRNVQDNCCLRLPYIDFKRDLG 32

RESULT 27
US-08-581-528A-20
Sequence 20, Application US/08581528A
Patent No. 5986058
GENERAL INFORMATION:
APPLICANT: Lee, Se-Jin
APPLICANT: Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-7
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
STATE: CA
COUNTRY: USA
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/581,528A
FILING DATE: 03-Sept-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/089,670
FILING DATE: 09-JUL-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Halle, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/081001
TELECOMMUNICATION INFORMATION:

TELEPHONE: 619/678-5070
TELEFAX: 619/678-5099
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115
US-08-581-528A-20

Query Match 100.0%; Score 163; DB 2; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCRLRPLYIDFKRDLG 29
|||
Db 4 ALDAAYCFRNVDNCCRLRPLYIDFKRDLG 32

RESULT 28

US-09-097-616-20
Sequence 20, Application US/09097616
Patent No. 6090563
GENERAL INFORMATION:
APPLICANT: Lee, Se-Jin
APPLICANT: Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
STATE: California
COUNTRY: USA
ZIP: 92037

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/581,529
FILING DATE: 15-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/082001
TELEPHONE: (619) 678-5070
TELEFAX: (619) 678-5099

INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115
US-09-097-616-20

Query Match 100.0%; Score 163; DB 3; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ALDAAYCFRNVDNCCRLRPLYIDFKRDLG 29
|||
Db 4 ALDAAYCFRNVDNCCRLRPLYIDFKRDLG 32

RESULT 29

US-09-177-860A-30
Sequence 30, Application US/09177860A
Patent No. 6096506
GENERAL INFORMATION:
APPLICANT: Huynh, Thanh
APPLICANT: Lee, Se-Jin
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR GROWTH DIFFERENTIATION FACTOR-8 AN
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Gray Cary Ware & Freidenrich LLP
STREET: 4365 Executive Drive, Suite 1600
CITY: San Diego
STATE: CA
COUNTRY: US
ZIP: 92121

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/177,860A
FILING DATE: 23-OCT-1998
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/525,596
FILING DATE: 19-SEP-1995
ATTORNEY/AGENT INFORMATION:
NAME: Haile, Ph.D, Lisa A.

REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/075003
TELECOMMUNICATION INFORMATION:
TELEPHONE: 858-677-1456
TELEFAX: 858-677-1465
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115
US-09-177-860A-30

Query Match 100.0%; Score 163; DB 3; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAYCFRNVDNCCRLRPLYIDFKRDLG 29
|||
Db 4 ALDAAYCFRNVDNCCRLRPLYIDFKRDLG 32

RESULT 30

US-09-145-060-26
Sequence 26, Application US/09145060
Patent No. 6245896
GENERAL INFORMATION:
APPLICANT: Lee, Se-Jin

APPLICANT: Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-5
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
STATE: CA
COUNTRY: USA
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/145,060
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/455,559
FILING DATE: 31-MAY-1995
APPLICATION NUMBER: 08/003,144
FILING DATE: 12-JAN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/057001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/678-5070
TELEFAX: 619/678-5099
INFORMATION FOR SEQ ID NO: 26:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2

US-09-145-060-26
Query Match 100.0%; Score 163; DB 3; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAVCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 4 ALDAAVCFRNVQDNCCLRLPLYIDFKRDLG 32
RESULT 31
US-09-378-238-40
Sequence 40, Application US/09378238
Patent No. 6465239
GENERAL INFORMATION:
APPLICANT: Lee, Se-Jin
APPLICANT: McPherson, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8 NUCLEIC
TITLE OF INVENTION: ACID AND POLYPEPTIDES FROM AQUATIC SPECIES AND NON-HUMAN
TITLE OF INVENTION: TRANSGENIC AQUATIC SPECIES
FILE REFERENCE: JHUI120-9
CURRENT APPLICATION NUMBER: US/09/378,238
CURRENT FILING DATE: 1999-08-19
EARLIER APPLICATION NUMBER: 08/795,071
EARLIER FILING DATE: 1997-02-05
EARLIER APPLICATION NUMBER: 08/525,596
EARLIER FILING DATE: 1995-10-25
EARLIER APPLICATION NUMBER: PCT/US94/03019
EARLIER FILING DATE: 1994-03-18
EARLIER APPLICATION NUMBER: 08/033,923
EARLIER FILING DATE: 1993-03-19
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Fast-Seq for Windows Version 4.0
SEQ ID NO 40

LENGTH: 115
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: TGF-beta-2
US-09-378-238-40

Query Match 100.0%; Score 163; DB 4; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAVCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 4 ALDAAVCFRNVQDNCCLRLPLYIDFKRDLG 32

RESULT 32
US-09-629-938-30
Sequence 30, Application US/09629938
Patent No. 6500664
GENERAL INFORMATION:
APPLICANT: Huynh, Thanh
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR GROWTH DIFFERENTIATION
FACTOR-8 AND METHODS OF USING SAME (Amended)

NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Gray Cary Ware & Freidenrich LLP
STREET: 4365 Executive Drive, Suite 1600
CITY: San Diego
STATE: CA
COUNTRY: US
ZIP: 92121

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/629,938
FILING DATE: 01-Aug-2000
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/177,860
FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:
NAME: Haile, Ph.D, Lisa A.

REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/075003

TELECOMMUNICATION INFORMATION:
TELEPHONE: 858-677-1456
TELEFAX: 858-677-1465

INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115

US-09-629-938-30
Query Match 100.0%; Score 163; DB 4; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAVCFRNVQDNCCLRLPLYIDFKRDLG 29
Db 4 ALDAAVCFRNVQDNCCLRLPLYIDFKRDLG 32


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RESULT 33
US-09-686-344-48
; Sequence 48, Application US/09686344
; Patent No. 6607884
; GENERAL INFORMATION:
; APPLICANT: Lee, Se-Jin
; APPLICANT: McPherson, Alexandra C.
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
; FILE REFERENCE: 07265/144001
; CURRENT APPLICATION NUMBER: US/09/686,344
; CURRENT FILING DATE: 2000-10-10
; PRIOR APPLICATION NUMBER: 08/862,445
; PRIOR FILING DATE: 1997-05-23
; PRIOR APPLICATION NUMBER: 08/847,910
; PRIOR FILING DATE: 1997-04-28
; PRIOR APPLICATION NUMBER: 08/795,071
; PRIOR FILING DATE: 1997-02-05
; PRIOR APPLICATION NUMBER: 08/525,596
; PRIOR FILING DATE: 1995-10-26
; PRIOR APPLICATION NUMBER: PCT/US94/03019
; PRIOR FILING DATE: 1994-03-18
; PRIOR APPLICATION NUMBER: 08/033,923
; PRIOR FILING DATE: 1993-03-19
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 48
; LENGTH: 115
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-686-344-48

Query Match 100.0%; Score 163; DB 4; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAVCFRNVQDNCCLRPVYIDFKRDLG 29
Db 4 ALDAAVCFRNVQDNCCLRPVYIDFKRDLG 32

RESULT 34
US-09-412-791D-20
; Sequence 20, Application US/09412791D
; Patent No. 6680372
; GENERAL INFORMATION:
; APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
; APPLICANT: LEE, Se-Jin
; APPLICANT: HUYNH, THANH
; TITLE OF INVENTION: ANTIBODIES BINDING TO GROWTH DIFFERENTIATION FACTOR-7
; FILE REFERENCE: JHU1130-2
; CURRENT APPLICATION NUMBER: US/09/412,791D
; CURRENT FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/581,528
; PRIOR FILING DATE: 1996-01-09
; PRIOR APPLICATION NUMBER: PCT/US94/07799
; PRIOR FILING DATE: 1994-07-08
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 115
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-412-791D-20

Query Match 100.0%; Score 163; DB 4; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAVCFRNVQDNCCLRPVYIDFKRDLG 29
Db 4 ALDAAVCFRNVQDNCCLRPVYIDFKRDLG 32
```

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RESULT 35
US-09-619-061-20
; Sequence 20, Application US/09619061
; Patent No. 6713302
; GENERAL INFORMATION:
; APPLICANT: Lee, Se-Jin
; APPLICANT: Huynh, Thanh
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
; NUMBER OF SEQUENCES: 21
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: California
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/619,061
; FILING DATE: 18-Jul-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/097,616
; FILING DATE: 15-JUN-1998
; APPLICATION NUMBER: US 08/581,529
; FILING DATE: 15-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Lisa A. Haile, Ph.D.
; REGISTRATION NUMBER: 38,347
; REFERENCE/DOCKET NUMBER: 07265/082001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 678-5070
; TELEFAX: (619) 678-5099
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 115 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; IMMEDIATE SOURCE:
; CLONE: TGF-beta-2
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..115
; SEQUENCE DESCRIPTION: SEQ ID NO: 20:
US-09-619-061-20

Query Match 100.0%; Score 163; DB 4; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAVCFRNVQDNCCLRPVYIDFKRDLG 29
Db 4 ALDAAVCFRNVQDNCCLRPVYIDFKRDLG 32

RESULT 36
PCT-US94-00657-26
; Sequence 26, Application PC/TUS9400657
; GENERAL INFORMATION:
; APPLICANT: SE-JIN LEE
; APPLICANT: HUYNH, THANH
; TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-5
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
```

STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
STATE: CALIFORNIA
COUNTRY: US
ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/00657
FILING DATE: 1/12/94
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. PH.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD3256 CIP OF PD2280
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/455-5100
TELEFAX: 619-455-5110
INFORMATION FOR SEQ ID NO: 26:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115
PCT-US94-00657-26

Query Match 100.0%; Score 163; DB 5; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVQDNCCLRPPLYIDFKRDLG 29
|||||
Db 4 ALDAAYCFRNVQDNCCLRPPLYIDFKRDLG 32

RESULT 37
PCT-US94-07762-20
Sequence 20, Application PC/TUS9407762
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East, Suite 500
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/07762
FILING DATE: 08-JUL-1994
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: TUMARKIN, LISA A., PH.D.
REGISTRATION NUMBER: P-38,347
REFERENCE/DOCKET NUMBER: FD2349
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100

TELEFAX: (619) 455-5110
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115
PCT-US94-07762-20

Query Match 100.0%; Score 163; DB 5; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVQDNCCLRPPLYIDFKRDLG 29
|||||
Db 4 ALDAAYCFRNVQDNCCLRPPLYIDFKRDLG 32

RESULT 38
PCT-US94-07799-20
Sequence 20, Application PC/TUS9407799
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-7
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East, Suite 500
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90067

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/07799
FILING DATE: 08-JUL-1994
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: TUMARKIN, LISA A., PH.D.
REGISTRATION NUMBER: P-38,347
REFERENCE/DOCKET NUMBER: FD-2348
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 115 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: TGF-beta-2
FEATURE:
NAME/KEY: Protein
LOCATION: 1..115
PCT-US94-07799-20

Query Match 100.0%; Score 163; DB 5; Length 115;
Best Local Similarity 100.0%; Pred. No. 7.3e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVQDNCCLRPPLYIDFKRDLG 29

Db 4 ALDAAYCFRNVDNCCCLRPYIDFKRDLG 32
|||||

RESULT 39
US-08-132-405-2
; Sequence 2, Application US/08132405
; Patent No. 5409896
; GENERAL INFORMATION:
; APPLICANT: Ammann, Arthur J.
; APPLICANT: Rudman, Christopher G.
; TITLE OF INVENTION: Method of Inducing Bone Growth Using
; TITLE OF INVENTION: TGF-Beta
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/132.405
; FILING DATE: 06-OCT-1993
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/063841
; FILING DATE: 18-MAY-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/790856
; FILING DATE: 12-NOV-1991
; APPLICATION NUMBER: 07/401906
; FILING DATE: 01-SEP-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: Hasak, Janet E.
; REGISTRATION NUMBER: 28,616
; REFERENCE/DOCKET NUMBER: 597D1C2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-1896
; TELEFAX: 415/952-9881
; TELEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 414 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
US-08-132-405-2

Query Match 100.0%; Score 163; DB 1; Length 414;
Best Local Similarity 100.0%; Pred. No. 2.8e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVDNCCCLRPYIDFKRDLG 29
|||||

Db 303 ALDAAYCFRNVDNCCCLRPYIDFKRDLG 331
|||||

RESULT 40
US-08-395-939A-2
; Sequence 2, Application US/08395939A
; Patent No. 5604204
; GENERAL INFORMATION:
; APPLICANT: Ammann, Arthur J.
; APPLICANT: Rudman, Christopher G.
; TITLE OF INVENTION: TGF-BETA COMPOSITION FOR INDUCING BONE
; TITLE OF INVENTION: GROWTH
; NUMBER OF SEQUENCES: 5

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/395.939A
; FILING DATE: 27-FEB-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/132405
; FILING DATE: 12-NOV-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/063841
; FILING DATE: 18-MAY-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/790856
; FILING DATE: 12-NOV-1991
; APPLICATION NUMBER: 07/401906
; FILING DATE: 1-SEP-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: Hasak, Janet E.
; REGISTRATION NUMBER: 28,616
; REFERENCE/DOCKET NUMBER: P0597D1C2D1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-1896
; TELEFAX: 415/952-9881
; TELEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 414 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
US-08-395-939A-2

Query Match 100.0%; Score 163; DB 1; Length 414;
Best Local Similarity 100.0%; Pred. No. 2.8e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALDAAYCFRNVDNCCCLRPYIDFKRDLG 29
|||||

Db 303 ALDAAYCFRNVDNCCCLRPYIDFKRDLG 331
|||||

RESULT 41
PCT-US91-01861-2
; Sequence 2, Application PC/TUS9101861
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; TITLE OF INVENTION: Method of Prediposing Mammals to
; TITLE OF INVENTION: Accelerated Tissue Repair
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:

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; APPLICATION NUMBER: PCT/US91/01861
; FILING DATE: 19910320
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA: U.S. Ser. No. 07/504,495
; APPLICATION NUMBER: 4 April 1990
; FILING DATE: 4 April 1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Hasak, Janet E.
; REGISTRATION NUMBER: 28,616
; REFERENCE/DOCKET NUMBER: 637
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/266-1896
; TELEFAX: 415/952-9881
; TELEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 414 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; PCT-US91-01861-2

Query Match 100.0%; Score 163; DB 5; Length 414;
Best Local Similarity 100.0%; Pred. No. 2.8e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 29
Db 303 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 331

RESULT 42
PCT-US94-03705-6
; Sequence 6, Application PC/TUS9403705
; GENERAL INFORMATION:
; APPLICANT: Mu-En Lee
; APPLICANT: Mark A. Perrella
; TITLE OF INVENTION: TRANSFORMING GROWTH
; TITLE OF INVENTION: FACTOR- INHIBITS
; TITLE OF INVENTION: INDUCIBLE NITRIC OXIDE
; TITLE OF INVENTION: SYNTHASE GENE
; TITLE OF INVENTION: TRANSCRIPTION
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: U.S.A.
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM PS/2 Model 502 or 55SX
; OPERATING SYSTEM: MS-DOS (Version 5.0)
; SOFTWARE: Wordperfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/03705
; FILING DATE: 5 April 1994
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Janis K. Fraser
; REGISTRATION NUMBER: Reg. No. 34,819
; REFERENCE/DOCKET NUMBER: 05433/007001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 542-5070
; TELEFAX: (617) 542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 414
; TYPE: amino acid
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```
; STRANDEDNESS:
; TOPOLOGY: linear
; PCT-US94-03705-6

Query Match 100.0%; Score 163; DB 5; Length 414;
Best Local Similarity 100.0%; Pred. No. 2.8e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 29
Db 303 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 331

RESULT 43
5221620-4
; Patent No. 5221620
; APPLICANT: PURCHIO, ANTHONY F.; MADISEN, LINDA; WEBB, NANCY
; TITLE OF INVENTION: CLONING AND EXPRESSION OF TRANSFORMING
; GROWTH FACTOR BETA-2
; NUMBER OF SEQUENCES: 16
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/446,020
; FILING DATE: 05-DEC-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 285,140
; FILING DATE: 16-DEC-1988
; APPLICATION NUMBER: 234,065
; FILING DATE: 18-AUG-1988
; APPLICATION NUMBER: 148,267
; FILING DATE: 25-JAN-1988
; APPLICATION NUMBER: 106,752
; FILING DATE: 06-OCT-1987
; SEQ ID NO: 4:
; LENGTH: 414
; 5221620-4

Query Match 100.0%; Score 163; DB 6; Length 414;
Best Local Similarity 100.0%; Pred. No. 2.8e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 29
Db 303 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 331

RESULT 44
US-10-017-372E-25
; Sequence 25, Application US/10017372E
; Patent No. 6756215
; GENERAL INFORMATION:
; APPLICANT: Wolfrum, Lawrence A
; APPLICANT: Letterio, John J
; TITLE OF INVENTION: FUNCTIONALIZED TGF-BETA FUSION PROTEINS
; FILE REFERENCE: 4239-61302
; CURRENT APPLICATION NUMBER: US/10/017,372E
; CURRENT FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/242,292
; PRIOR FILING DATE: 2000-10-20
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 25
; LENGTH: 427
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Murine (Mus musculus) TGF-beta2/N-5 FLAG Fusion Construct
; US-10-017-372E-25

Query Match 100.0%; Score 163; DB 4; Length 427;
Best Local Similarity 100.0%; Pred. No. 2.9e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALDAAAYCFRNVDNCCLRPLYIDFKRDLG 29
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Db      316 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 344
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RESULT 45
US-10-017-372E-27
; Sequence 27, Application US/10017372E
; Patent No. 6756215
; GENERAL INFORMATION:
; APPLICANT: Wolfrain, Lawrence A
; APPLICANT: Letterio, John J
; TITLE OF INVENTION: FUNCTIONALIZED TGF-BETA FUSION PROTEINS
; FILE REFERENCE: 4239-61302
; CURRENT APPLICATION NUMBER: US/10/017,372E
; CURRENT FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: US 60/242,292
; PRIOR FILING DATE: 2000-10-20
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 27
; LENGTH: 431
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Murine (Mus musculus) TGF-beta2/N-5 HA Fusion Construct
US-10-017-372E-27
Query Match      100.0%; Score 163; DB 4; Length 431;
Best Local Similarity 100.0%; Pred. No. 2.9e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy      1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
Db      320 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 348
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RESULT 46
5221620-2
; Patent No. 5221620
; APPLICANT: PORCHIO, ANTHONY F.; MADISEN, LINDA; WEBB, NANCY
; TITLE OF INVENTION: CLONING AND EXPRESSION OF TRANSFORMING
; GROWTH FACTOR BETA-2
; NUMBER OF SEQUENCES: 16
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/446,020
; FILING DATE: 05-DEC-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 285,140
; FILING DATE: 16-DEC-1988
; APPLICATION NUMBER: 234,065
; FILING DATE: 18-AUG-1988
; APPLICATION NUMBER: 148,267
; FILING DATE: 25-JAN-1988
; APPLICATION NUMBER: 106,752
; FILING DATE: 06-OCT-1987
; SEQ ID NO: 2
; LENGTH: 442
5221620-2
Query Match      100.0%; Score 163; DB 6; Length 442;
Best Local Similarity 100.0%; Pred. No. 3e-14;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy      1 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 29
Db      331 ALDAAFCFRNVQDNCCLRPYIDFKRDLG 359
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Search completed: October 31, 2004, 14:27:17
Job time : 26 secs
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